AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES
	1 of 99

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO.(If applicable)
0002	02-Oct-2001	W13G86-1040-8104	

6. ISSUED BY CODE DACA33
DEPT. OF THE ARMY
N E DISTRICT, CORPS OF ENGINEERS
696 VIRGINIA ROAD
CONCORD MA 01742-2751

7. ADMINISTERED BY (If other than item 6) CODE
See Item 6

8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)

CODE FACILITY CODE

X	9A. AMENDMENT OF SOLICITATION NO. DACA33-01-R-0004
X	9B. DATED (SEE ITEM 11) 29-Aug-2001
	10A. MOD. OF CONTRACT/ORDER NO.
	10B. DATED (SEE ITEM 13)

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

[X] The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer [ ] is extended, [X] is not extended.

Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS.
IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

[ ] A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

[ ] B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).

[ ] C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

[ ] D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor [ ] is not, [ ] is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

Amendment is necessary to correct a typographical error in Section C.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
15B. CONTRACTOR/OFFEROR _____ (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY _____ (Signature of Contracting Officer)	16C. DATE SIGNED 02-Oct-2001

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

SUMMARY OF CHANGES

Changes in Section C

Part 1. SCOPE OF WORK, DESCRIPTION & SPECIFICATIONS

PURPOSE: This is an indefinite quantity delivery order contract for furnishing all labor, equipment, transportation, materials and supplies to perform selective inspection, diagnostic, maintenance, repair, replacement, abatement, construction and operation services of Government-owned facilities at the U.S. Army Soldier Systems Command (SSCOM) located on Kansas Street, Natick, MA 01760 as specified in Task Orders issued against this contract.

Work to be performed as defined in the following technical provisions:

Section TP – 1 **General**

Section TP – 2 **Contract Administration**

Section TP – 3 **General demolition and construction**

Section TP – 4 **Preventative maintenance**

Section TP – 5 **Cooling tower and chemical treatment**

Section TP – 6 **Air conditioning and refrigeration**

Section TP – 7 **Air filter service and maintenance**

Section TP – 8 **Exhaust fan and fume hood maintenance and repair**

Section TP – 9 **Electrical maintenance and repair**

Section TP – 10 **High voltage electrical system maintenance**

Section TP – 11 **General plumbing**

Section TP – 12 **Mechanical maintenance and repair**

Section TP – 13 **Boiler plant operations and support**

Section TP – 14 **Snow plowing operations**

Section TP – 15 **Door maintenance and repair**

Section TP – 16 **Landscape maintenance**

Section TP – 17 **Roof inspection and maintenance**

Section TP – 18 **Elevator inspection and maintenance**

Section TP – 19 **Scheduled, unscheduled and emergency services**

Section TP – 20 **Asbestos Containing Material (ACM) Inspection and Abatement**

Technical Provisions
Section TP – 1
General

TP – 1.1 Applicable Documents and References:

National Electrical Code
National Fire Protection Association
National Emissions Standards for Hazardous Air Pollutants
American National Standards Institute
OSHA Safety and Occupational Health Standards
National Plumbing Standards Code Illustrated
Massachusetts Highway Department Specifications for Highways and Bridges (1988)
American Society for Testing and Materials
Vehicle and Equipment Manufacturer's Repair and Operating Manuals
Underwriter's Laboratories, Inc.
National Warm Air and Air Conditioning Association
National Association of Fan Manufacturers
American Society of Heating, Air Conditioning, and Refrigeration Institution
Sheet Metal Manufacturers
Air Moving and Conditioning Association
American Society of Heating, Refrigeration and Air Conditioning Engineers
American Welding Society
American Concrete Institute
Portland Cement Associates
Asphalt Institute
American Institute of Steel Construction
National Association of Architectural Metal Manufacturers
Architectural Aluminum Manufacturers Association
The Aluminum Association
American Society of Testing and Materials
Flat Glass marketing Association
American Association of Nurserymen, Inc.
Architectural Graphic Standards
OSHA Hazard Communication Standard (29 CFR 1926.59)
American Society of Mechanical Engineers Code (ASME A17.1)
Commonwealth of Massachusetts Code (524 CMR)
Army Environmental Quality Regulation AR 200-1
Army Environmental Quality Regulation AR 200-2

TP – 1.2 Other Contracts:

a. The Government may accomplish additional and/or similar work with Government in-house or other contracted labor force. The Contractor shall cooperate with other contractor or government work forces. The Contracting Officer (CO) or the Contracting Officer's Representative (COR) will coordinate work assignments with the Contractor to minimize conflicts. The Contractor shall not commit or permit any act of interference in the performance of other contract or government work forces.

b. Government maintenance personnel may accompany contractor personnel to perform service, maintenance and/or inspection work in chosen areas. Also, Government personnel will be performing maintenance, service and repairs within areas that are both within and outside the scope of work of this contract.

c. The Contractor may be working with the government labor force to perform maintenance, service repair or replacement work and/or to accomplish other tasks identified in the Contract Line Item Bid Sheets. The CO or his authorized representative will coordinate joint work assignments with the Contractor.

d. The Contractor will not be working under the supervision of the Government labor force and shall maintain proper supervision of his own work force. The Contractor shall only complete work as directed by the Contracting Officer or the Contracting Officer's Representative (COR).

TP – 1.3 Government Furnished Facilities:

a. Storage yard and indoor shop space will be made available for the Contractor's use under this contract. Any workspace made available to the Contractor shall be maintained to the same standards as the adjacent areas occupied by the Government and the Contractor shall assume responsibility for the safekeeping and security of any facilities provided. Government furnished storage yard and shop building space will be identified by the Government during the Pre-work meeting.

b. Any oil, grease, or chemical spills shall be immediately cleaned up in accordance with applicable Federal, state, and local environmental laws and regulations. Contractor shall notify the SSCOM Environmental, Safety and Health Office (ESHO) and the CO or his authorized COR, immediately when any spill or release occurs.

c. Government furnished facilities are subject to periodic inspections by the CO or his authorized representative for safety, maintenance, environmental compliance, security and housekeeping. The Contractor shall immediately correct any deficiency noted during Government inspection of these facilities. Should the CO or his authorized representative determine that these facilities are not kept and maintained with identified standards and the Contractor fails to take immediate action to correct deficiencies, the CO or his authorized representative may choose to have the corrective action performed by the Government and the actual costs of corrective action shall be deducted from Contractor payments.

d. At the completion of the contract all facilities shall be returned to the Government in the same condition as received, excluding normal wear.

TP – 1.4 Government Furnished Materials and Supplies:

a. A limited amount of Government furnished materials and supplies may remain on hand and may be made available for use by the Contractor. Materials and supplies may include, but are not limited to, ceiling and floor tiles that match those present in buildings and offices.

b. An inventory of Government furnished materials and supplies may be obtained from the CO or his authorized representative on a regular basis. All Task Orders issued by the Government will identify where Government furnished materials and supplies are to be used. Despite the occasional availability of

Government furnished materials, the contractor shall be prepared to procure any and all materials as called out in the delivery order.

TP – 1.5 Identification of Contractor Employees:

a. The Contractor shall furnish regular and emergency response employees with company identification cards.

b. The Contractor's vehicles shall be identified with the company name displayed on both of the front doors of each vehicle to provide visible identification.

c. All contract employees are required to obtain a SSC Contractor Badge. The badge must be obtained on their first day of work and must be worn above their waist at all times.

d. Contractor shall be responsible for return of any issued ID cards or badges to the Contracting Officer upon completion of the project. Final payment will not be made until all ID cards or badges are returned.

TP – 1.6 Communication:

a. The Contractor or his Work Leader shall maintain a communication system that insures 24-hour availability with the CO or his authorized representative, seven days per week as described in Section TP-1.13. The Contractor shall maintain that communication system to insure a maximum one (1) hour response to all messages or inquires from the CO or his authorized representative. The emergency response person(s) shall have the authority to act on behalf of the Contractor to perform the necessary emergency work without delay.

b. In addition, the Contractor shall maintain a communication system consisting of a cellular phone for use during normal working hours that insures reliable communication between the COR or his authorized representative and the Contractor or his designated Work Leader. Furthermore, the Contractor shall maintain an Internet connection system capable of receiving and sending E-mail with no more than a four (4) hour response during normal operating hours and a thirteen (13) hour turnaround during off-duty hours on any time-dependent correspondence.

c. Emergency work will be initiated by a phone call from the CO or his authorized representative to the Contractor or his designated Work Leader.

TP – 1.7 Closure of Facilities:

a. From time to time during the life of the contract, facilities, buildings or housing units may be subject to closure due to major construction, renovation or inclement weather. As a result of this closure, the nature or type of Task Orders at the job site may fluctuate on a temporary or permanent basis. The Contractor's work force must be sufficiently flexible to meet these changing needs. The CO or his authorized representative will notify the Contractor of any closure(s) effecting the performance of this contract. These shall be either scheduled – or due to forces out of the government's control – therefore there shall be no charges to the government for such events.

b. Any Contractor service or work that might interrupt the day-to-day operation of, or enter into, government buildings or facilities or disrupt any building or housing occupant(s) shall be coordinated with and approved in advance by the CO or his authorized representative. The Contractor shall make every effort and may have to coordinate work so as to keep interruptions to a minimum.

TP – 1.8 Safeguarding Government Property:

The Contractor shall cooperate with Government personnel in safeguarding Government property. The Contractor shall be responsible for reporting all acts of vandalism, larceny or pilferage of the Contractor's property or the personal property of Contractor's employees to the CO or his authorized representative. Reports shall also be made to the Office of Security Management (OSM).

TP – 1.9 Security:

a. The U.S. Army Soldiers Systems Command is a military reservation and all rules and regulations issued by the Commanding Officer covering general safety, security, sanitary requirements, pollution control and traffic regulations, shall be observed by the Contractor. Information regarding these requirements may be obtained by contacting the CO or his authorized representative, who will provide such information or assist in obtaining information from the appropriate authorities.

b. Immediately upon arrival on the work site at the U.S. Army Soldier Systems Command, the Contractor shall report to the security office at the main gate for the required clearances.

c. The Contractor shall report to the CO or his authorized representative before entering the housing area. At this time, the COR will coordinate with the Security Office to issue identification cards to the Contractor in order to perform work assignments within the housing areas. The Contractor will be required to display an identification card to the occupants of the housing units.

d. From time to time, security measures at the U.S. Army Soldiers Systems Command may be increased. During these peak times, the Contractor will be required to comply with stronger security or entrance policies. These measures may include the wearing of visible identification badges and signing into and out of the installation on a daily basis.

e. The Contractor must provide the OSM a list of all personnel to include full name and date of birth prior to the first day of work. This list will allow the Law Enforcement Branch, OSM to conduct Board of Probation's records checks on all personnel entering the installation and its housing areas.

TP – 1.10 Licenses and Certification:

a. The Contractor shall obtain, at his own expense, any and all licenses, certifications or permits required to perform work identified in the Technical Provisions and/or Schedule of Supplies or Services and make them available upon request.

b. Equipment operators shall be experienced and qualified to operate the equipment they are using. They shall hold a Commercial Drivers License (CDL) and/or be Hoist Engineer Licensed by the Commonwealth of Massachusetts for the motor vehicles they are operating.

c. The Contractor will be required to supply, at his own expense, and use personal protective equipment as required.

d. It is the responsibility of the Contractor to obtain all needed permits for "Hot Work" to include, but not limited to, torch cutting, welding, laser cutting, soldering, etc. prior to commencement of work. Permits for "Hot Work" at SSCOM may be obtained by contacting the Public Works Team Fire Inspector who can be paged at (508) 301-6860.

e. The Contractor shall comply with all current Federal, state, and local permitting or licensing requirements and shall comply with any subsequent changes.

f. The Contractor shall assure that all personnel working on elevators be licensed by the Commonwealth of Massachusetts. The names and license numbers of these personnel shall be submitted to the Contractor Officer upon acceptance of this contract.

g. The Contractor shall assure that all personnel working of projects involving asbestos containing material (ACM) shall meet the training requirements found in the EPA Model Accreditation Program (MAP) found in 40 CFR part 763, Subpart E, Appendix C. and the installation Asbestos Program Management Document if more stringent. These documents are available at the Environmental, Safety and Health Office (ESHO) which can be contacted at (508) 223-5911 during normal work hours.

TP – 1.11 Reports:

a. The Contractor shall prepare and submit inspection, maintenance, condition and service reports for all preventive maintenance, inspections, diagnostics, etc. These reports shall be submitted monthly, semi-annually or annually depending on the frequency of service. Reports shall be included with the monthly invoice for services performed during the last billing period.

b. Condition reports shall be prepared for each unit, by building, for all equipment located within that building and noted as such.

c. The report will include location, description of unit, and any inspection, repair and/or maintenance work performed or proposed. Each report shall contain either actual or estimated costs to repair or replace the unit.

TP – 1.12 Emergency Services:

a. The Contractor shall maintain adequate labor, equipment and supplies to provide emergency services within two (2) hours of receiving an emergency call during normal operating hours and within three (3) hours during premium hours on a 24-hour, seven-day-a-week service throughout the life of this contract. Emergency work will be initiated by notice (phone call or other means) from the CO or his authorized representative. A list of authorized individuals authorized to request emergency work on behalf of the Government will be provided to the Contractor upon award of contract.

b. The Contractor shall be able to mobilize to an emergency repair to High Voltage Electrical Systems within thirty (30) minutes of receiving an emergency call with arrival onsite of not greater than one (1) hour on a 24-hour, seven-days-a-week basis throughout the length of this contract.

c. The Contractor will receive a minimum four (4) hour's payment for all emergency response repairs or service calls outside of normal operating hours and a minimum of three (3) hour's payment during normal operating hours. When emergency work obligates the Contractor to pay premium wages, this additional cost will be added to the basic hourly rate for services as an "Emergency Work Rate".

d. The Contractor shall notify the CO or his authorized representative to report any emergency work that cannot be corrected within a 24-hour period. In such cases, the Contractor shall perform remedial work to temporarily correct the situation, and shall advise the CO or his authorized representative of the problem as soon as possible.

e. A premium service call is one which occurs after eight (8) hours has been worked within the previous 16-hour period and/or during non-duty hours. The Contractor will be paid time-and-a-half (1.5 times the basic rate bid per hour).

f. If a call for services occurs outside of normal operating hours (7:00 a.m. to 5:30 p.m.). The Contractor will be paid at time-and-a half the basic rate bid per hour.

g. Travel time, up to one (1) hour, shall be counted as part of the emergency repair or service call and shall be documented and verifiable.

h. The Contractor shall immediately perform any work needed to correct an immediate danger, health hazard or a threat to persons or property. When emergency work is identified by the Contractor, the CO or his authorized representative shall be contacted prior to initiating work unless the nature of the emergency requires immediate action to preserve life or avoid injury. In such cases, the Contractor shall take steps to immediately correct or minimize the threat and notify the CO or his authorized as soon as reasonable thereafter.

TP – 1.13 Environmental Protection and Reporting:

a. Under no circumstance is hazardous waste to be transported onto Government property. All hazardous materials transported onto Government property will be pre-approved by the CO or his authorized representative. An inventory of all chemicals brought onto the installation shall be provided to the CO or his authorized representative.

b. Where available, non-hazardous materials will be substituted for hazardous materials, unless specifically required elsewhere in this contract. Where hazardous materials are needed, the Contractor will adhere to all applicable federal and state regulations regarding the transportation, storage, handling and disposal of hazardous material or waste. In the absence of regulations, the Contractor will apply the best management practices or available technology in the use, handling, storage and disposal of hazardous materials and wastes.

c. The Contractor shall submit Material Safety Data Sheets (MSDS) to the CO or his authorized representative for all hazardous materials to be used on-site under this contract.

d. Any spill or release of hazardous waste or material at the U.S. Army Soldier Systems Command shall be immediately reported to the SSOC-security at (508) 233-4201 and the Environmental, Safety and Health Office (ESHO) at (508) 223-5911 during normal work hours. This clause does not relieve the Contractor of meeting current U.S. Environmental Protection Agency (USEPA) or Massachusetts Department of Environmental Protection (MASSDEP) reporting requirements.

e. Any spill or release of hazardous materials or waste into the environment as a result of the Contractor's work shall be the sole responsibility of the Contractor and shall be contained and cleaned up at no expense to the Government. Any release or spill shall be cleaned to USEPA and MADEP standards.

f. In the event that any federal, state or local enforcement or regulatory agency contacts the Contractor for any reason related to environmental compliance arising out of performance of this contract, the Contractor shall immediately inform the ESHO and the CO or his authorized representative. All events shall be reported no later than close of business on the day the contact is made.

g. All Contract personal shall meet the mandatory asbestos training requirements specified in the EPA Model Accreditation Program (MAP) found in 40 CFR Part 763, Subpart E, Appendix C. for the particular type of work they are to perform.

TP – 1.14 Utilities:

a. The Contractor may use Government utilities where available. The Contractor shall make every effort to conserve utilities. Government-furnished utilities shall be used only in the performance of work specified in this contract.

b. No utility including, but not limited to, electrical, alarm, water or communication services shall be interrupted by the Contractor to make connections, to relocate, or for any other purpose without prior notification to and approval from the CO or his authorized representative.

c. Unless due to an emergency, the notification shall be made not less than one (1) day prior to the date of the proposed interruption. The notification shall include the following information:

1. Type of Utility (e.g. gas, computer line, fire alarm, etc.).
2. Size of line and location of shutoff.
3. Buildings and services affected.
4. Hours and date(s) of shutoff.
5. Estimated length of time service(s) will be interrupted.

TP – 1.15 Replacement Parts:

Replacement parts, when required, shall be new standard parts by the manufacturer. All such parts shall carry not less than a 90-day guarantee. Parts found to be defective within the guarantee period shall be replaced at no cost to the Government. Spent parts shall be removed from work site and properly disposed by the Contractor.

TP – 1.16 Safety Requirements:

a. The Contractor will be required to comply with all current OSHA (CFR 1926/1910 (Safety and Health Standards)). These documents are available for review in the work site Safety Office.

b. Noncompliance with OSHA standards or recognized practices for that industry or trade will be documented and a copy of the document will be furnished to the Contractor, his insurance carrier, and the regional OSHA office for their information and action.

c. The Contractor must provide all personal safety equipment to on-site Contractor or sub-Contractor personnel including, but not limited to, respirators, hearing protection, safety glasses, hard hats and any other required protective clothing and equipment to insure personal safety and maintain OSHA compliance.

TP – 1.17 Hours of Work:

a. All work shall be accomplished during normal duty hours, 7:00 a.m. through 5:30 p.m. Eastern Standard Time, Monday through Friday, unless otherwise agreed between the Contractor and the CO or his authorized representative. All other work performed outside of these hours shall be considered premium service only if the Government has determined or required that it shall be conducted at these times.

b. Premium (overtime) working hours shall be any work beyond the normal duty hours of 7:00 a.m. through 5:30 p.m. Eastern Standard Time Monday through Friday unless otherwise agreed upon between the Contractor and the CO or his authorized representative.

c. Emergency work hours shall be 24 hours per day, 7 days per week upon notification of the CO or his authorized representative or whenever the Contractor is called back to the work site beyond normal duty hours. The Contractor may perform work outside of the normal duty hours for his convenience at non-premium rates if approved by the CO or his authorized representative.

d. The Federal Holidays observed are:

New Years Day (January 1)
Martin Luther King's Birthday (3rd Monday in January)
Washington's Birthday (3rd Monday in February)
Memorial Day (Last Monday in May)
Independence Day (July 4th)
Labor Day (1st Monday in September)
Columbus Day (2nd Monday in October)
Veterans Day (November 11th)
Thanksgiving (4th Thursday in November)
Christmas (December 25th)

e. When one of the above-designated holidays falls on a Sunday, the following Monday is observed as a legal holiday. When a federal holiday falls on a Saturday, the proceeding Friday is observed as a legal holiday.

f. Work in occupied office areas, that involves disruption to workers or poses a safety or health hazard, will be performed during off hours when these areas are not occupied as determined by the Government. The Contractor will submit to the CO or his authorized representative a schedule for work to be performed after normal working hours.

TP – 1-18 Smoking Policy:

Indoor smoking is not allowed in any workplace building. Outside smoking is limited to designated gazebos. The Contractor shall enforce the DoD/SSCOM "No Smoking" rules for contract employees.

TP – 1.19 Barricades and Warning Signs:

a. The Contractor shall provide and maintain suitable barricades and danger and warning signs at all points of entry to those sections of roadways, parking lots, sidewalks, stairways, or other buildings or housing areas that are to be closed to public travel during service, maintenance or repair operations under the contract. The Contractor must first obtain approval from the CO or COR to erect such signage.

b. When needed, the Contractor shall also furnish flagmen to warn and direct traffic or to prevent travel on any portion of roadways or parking areas during the periods in which operations under the contract are performed as may be required to ensure safety and prevent accidents.

Technical Provisions
Section 2
Contract Administration

TP – 2.1 General Information:

a. The Contractor's work and responsibility includes all management, programming, administration, and scheduling necessary to assure that all inspections, repair services, maintenance and minor construction work assignments are conducted in accordance with the contract and all applicable laws, regulation, codes, or directives.

b. The Contractor shall insure all work meets or exceeds manufacturers specs and specification included in referenced documents and applicable publications in Technical Provision – 1.1. The Contractor shall perform all related contract administration services necessary to perform the work such as supply, procurement, quality control, Contractor financial control, and maintenance of accurate and complete records, files and databases.

c. The Contractor should be aware that Natick Labs operates and maintains unique equipment and facilities. The Contractor should make arrangements with the Public Works office to familiarize himself with the equipment, facilities and operating procedures.

d. Areas of work to be performed (including buildings, roads and parking lots) by the Contractor are contained in maps and drawings identified in Technical Exhibit A.

TP – 2.2 Contract Period:

Contract will be awarded for one (1) year, commencing on date of award, with four option years unless terminated under the terms of contract.

TP – 2.3 Contract Limitations:

a. The total of delivery orders issued during the first year and/or any option year under the terms of this contract shall not exceed $2,000,000, with **$450,000** maximum per delivery order. The minimum guaranteed amount of delivery orders issued during the first year shall be $40,000 and $20,000 for each option year.

b. The initial contract period is for one (1) year with the Government's option to extend the term of the contract for four (4) additional one-year periods.

TP – 2.4 Site Visit:

a. Bidders are strongly encouraged to perform an on-site inspection of the facilities located at the U.S. Army Soldier and Biological Chemical Command – Natick (SBCCOM(N)) Soldier Systems Center (SSC) to determine size, location, complexity and condition of equipment, facilities, buildings or housing included in this contract.

b. Floor plans of buildings with physical plant, mechanical and utility areas marked will be provided to Contractors prior to bidding. A scheduled meeting with the CO or his authorized representative can be arranged for any questions arising from the contract.

TP – 2.5 Pre-Work Conference:

a. The Contractor shall attend a pre-work conference at which the Contracting Officer shall establish the line of authority and government procedures for contractual, administrative, and work matters. The schedule of required submittals and reports will also be discussed. A letter of record, documenting all pre-work conference discussions, will be furnished to all attendees. No work may begin until a pre-work conference has been conducted. The Contractor will not be paid for time spent in discussion of work procedures, practices or accomplishments or for any administrative overhead. Overhead and profit shall be included in the hourly wages on the bid schedule.

b. At the pre-work conference, the Contractor will identify Work Leaders and their credentials, including how they can be contacted. The Contracting Officer will identify the authorized Contracting Officer's Representative (COR) and inspector(s)**.**

TP – 2.6 Estimated Quantities of Work:

a. Estimated quantities of work to be performed are identified in the Schedule of Supplies or Services. The quantities are approximate and are provided as information only to assist in preparation of a contract bid. They are not guaranteed and actual quantities may vary significantly. Variation in the estimated quantities is not justification for modification of the contract or a request for additional payment.

b. The Government reserves the right to perform any or all of the work or services described in the Schedule of Supplies or Services.

TP – 2.7 Contractor Submittals:

a. Unless otherwise specified, the Contractor shall submit to the CO or his authorized representative, prior to the pre-work conference, and shall not begin work until all submittals are approved, the following information:

1. Certificate of Insurance. The Contractor shall furnish the original certificate of insurance to the Contracting Office and a copy to the authorized COR.
2. Safety Plan. (See TP – 2.8) Note: See guide for Accident Prevention Plan attached.
3. Quality Control Plan (See TP – 2.9).
4. Certification of Employees Qualified to Administer First Aid and CPR (See TP – 1.11).
5. Sub-contracting Plan (if applicable).
6. Confined Space Entry Plan (See TP – 2.11).
7. Written Hazard Communication Program (See TP – 2.12).
8. Monthly Operating Plan - including contact numbers and information (See TP – 2.19).

b. The Contractor has three (3) days to correct and resubmit any returned/unapproved submittal(s).

TP – 2.8 Safety Plan:

a. The Contractor shall submit, for acceptance of the CO, an accident prevention plan in accordance with OSHA Regulations. The Contractor shall identify to the Government those contractors that have been trained accordingly**.**

b. If the Contractor fails or refuses to promptly comply with any safety requirements, the CO or his authorized representative may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No portion of the time lost due to such stop order shall be made subject to claim for extension of time or for excess costs or damages to the Contractor, and the Contractor will not be paid for work not performed as a result of the stop order.

c. All minor accidents shall be reported to the CO or his authorized representative within 24 hours of the occurrence. All serious accidents or those resulting in death or injury requiring medical attention) shall be reported immediately.

d. An Asbestos Hazard Abatement Plan appendix to the Accident Prevention Plan shall be prepared for any tasks involving the inspection, removal or abatement of asbestos containing materials. This plan shall address all requirements found in the installation Asbestos Management Plan.

TP – 2.9 Contractor Quality Control (CQC) Plan:

a. The Contractor shall develop and maintain an effective CQC plan to satisfactorily meet contract specifications. No work will be performed until the CQC plan is approved. A copy of the Contractor's CQC plan shall be provided to the CO or his authorized representative at the pre-work conference.

b. The Contractor's Quality Control Plan shall include the names of inspectors, how often inspections will be made, the type of inspection (100%, random, planned), contract inspection checklists for maintenance activities, written records of all quality control inspections, including how deficiencies will be identified and corrected.

c. Only the Work Leader and/or designated Quality Control Inspector shall inspect contract work. The Contractor's inspection system shall insure that work is complete with all the technical provisions of the contract performed, and nothing omitted or left undone.

d. In no case shall a worker inspect his or her own work.

e. Government inspectors will assure that the CQC Plan is being followed, but the presence or absence of a Government inspector shall not relieve the Contractor of responsibility for the proper execution of work in accordance with the contract specifications.

TP – 2.10 Quality Assurance:

a. The Government will monitor the Contractor's performance and reserves the right to perform inspection at a level sufficient to assure the completion of work and adequacy of the Contractor's Quality Control plan. The Government will use a combination of random, planned, and 100% inspection.

b. The CO or his authorized representative will inform the Contractor how the Government intends to inspect the contract and who is in charge of Quality Assurance.

c. When the Contractor fails to perform according to the performance standards, the CO or his authorized representative will notify the Contractor in writing as to the nature and extent of the deficiency. The Contractor will respond in writing why the performance was less than satisfactory and how the problem can be corrected and prevented in the future. The Contractor will return the written response within three (3) days after formal notification by the CO or his authorized representative.

d. If the performance of any required service is unsatisfactory and not quickly correctable by the Contractor, the Government reserves the right to complete the repair or service and deduct the cost from payments due the Contractor. Pay deduction will be based on the itemized price of the Task Order or actual cost for performing the work under separate contract.

e. The presence or absence of a Government inspector shall not relieve the Contractor of responsibility for the proper execution of the work in accordance with the specifications.

TP – 2.11 Confined Space Entry:

a. The Contractor shall prepare a Confined Space Entry plan prepared in accordance with Technical Provision – 2.7 (Contractors Submittals). Work in confined spaces shall comply will all pertinent sections of OSHA regulations.

b. Training records of certification for employees and equipment certification shall be furnished to the CO or his authorized representative prior to entry. The Contractor may secure and provide the services of a qualified and approved Rescue Team Service.

c. All costs associated with confined space entry including, but not limited to, mobilization and demobilization, calibrating and re-calibrating equipment and cleaning equipment, etc. shall be included in the Contractor's estimated cost.

TP – 2.12 Hazard Communication Plan:

a. The Contractor is required to comply with the requirements of the OSHA Hazard Communication Standard (29 CFR 1926.59). This standard is designed to inform workers of safe and appropriate methods of working with hazardous substances in the workplace. The standard has five requirements, and every hazardous or potentially hazardous substance used or stored in the work area is subject to all five. They are:

1. Hazard Evaluation
2. Warning Labels
3. Material Safety Data Sheets (MSDS)
4. Work Area Specific Training
5. The Written Hazard Communication Plan

b. The Contractor must prepare a written Hazard Communication Plan. This document will be included in the Contractor's Accident Prevention Plan. This document states how the Contractor plans to ensure

that hazardous materials are to be labeled, where MSDS will be maintained and how employees will be provided with work area specific information and training.

TP – 2.13 Work Leaders:

a. The Contractor shall act as, or designate in his absence, a Work Leader to be present on-site whenever work specified in Task Orders are being performed. The Contractor shall notify the CO or his authorized representative of whom the on-site Work Leader(s) will be and when each work leader comes on the site.

b. The Work Leader will complete a daily activity report that is to be submitted to the CO or his authorized representative.

c. The Work Leader shall have full authority to contractually commit the Contractor for prompt action on any matter pertaining to contract administration or performance. The Contractor, or in his absence the Work Leader, shall deal directly with the CO or his authorized representative to coordinate work schedules and assignments within the contract terms.

d. The Contractor or Work Leader will be the central point of contact with the Government for performance of all work.

e. Either the Contractor or Work Leader must be physically present on the job site when work is being performed, which could be 7 days a week.

f. The Work Leader shall be able to effectively read, write, speak and understand the English language.

TP – 2.14 Contract Employees:

a. All Contractor employees including service mechanics and technicians shall have had the education and/or experience to enable them to understand the systems and components to be operated, maintained, and repaired under this contract.

b. Subcontractors or consultants may be requested to perform highly specialized or one-time repair work.

c. All Contractor employees shall conduct themselves in a proper and courteous manner. Since the majority of work is performed in the presence of government employees and/or their families and guests, the conduct of all employees is critical and closely monitored.

d. Being under the influence or consuming alcoholic beverages or controlled substances by the Contractor, employees, consultants or subcontractors while on duty is prohibited.

e. The CO or his authorized representative may require the Contractor to remove from the work site any employee or sub-contractor of the contractor who is incompetent, endangers persons or property, or whose physical or mental condition would impair their ability to perform the work. Notification to the Contractor shall be made in writing if time and circumstances permit. Otherwise, notification shall be verbal and shall be confirmed in writing as soon as possible. The Contracting Officer has the final word.

f. No employee removal will reduce the Contractor’s obligation to perform all work required under this contract and shall not be the basis for a time extension.

TP – 2.15 Basis of Payment:

a. Payment for contract line item numbers along with any invoices for materials will be submitted to the CO or his authorized representative for final approval prior to the Contracting Officer issuing a receiving report.

b. Payment for normal work will be paid according to the itemized Task Order.

c. Payment for materials and equipment will be billed as itemized on the Task Order. Copies of original invoices for parts and materials will be submitted to the CO or his authorized representative for cost validation.

d. Payment for premium work (overtime) will be billed on a time-and-a-half basis.

e. Payment for emergency response work will be billed on a time-and-a-half basis. If an emergency response call occurs on a Sunday or a holiday, the work will be billed at a rate two times the basic rate bid per hour.

f. For any parts and materials replacement that are inspected and concurred upon by the CO or his authorized representative payment will be made.

TP – 2.16 Method of Payment:

Upon completion of work on one or more individual Task Orders, the Contractor shall submit a monthly invoice for work completed at the U.S Army Soldiers Systems Command (SSCOM) to the Directorate of Public Works, U.S. Army Soldier Systems Command, Natick, MA. 10760.

TP – 2.17 Major Purchases:

a. Materials and equipment shall be included in the Contractor's estimate, and vendor quotes included, for the work requested and presented to the CO or his authorized representative for approval. The Contractor will be required to pick up parts from the vendor(s) selected if the vendor(s) cannot deliver needed parts or equipment by the time required.

b. In the event of emergency service or repairs, and it is not possible to obtain advance procurement approval from the CO or his authorized representative, the Contractor is authorized to procure those parts necessary to effect immediate repair or temporary repair in order to protect people or property. The cost of emergency repair parts will be reimbursable in the same manner as for materials and equipment.

TP – 2.18 Task Orders:

a. All work completed under this contract shall be based upon Task Orders issued to the Contractor by the CO or his authorized representative. Task Orders will identify the following:

1. Work to be accomplished broken down into detailed tasks, time and material lists

2. Location of work
3. Schedule and duration
4. Negotiated cost of work required to include detailed time & materials identifications
5. Type of work listed on the Schedule of Supplies or Services

b. The Contractor is authorized to perform emergency response service, maintenance and repair work as identified in this contract without a Task Order issued by the Government.

TP – 2.19 Monthly Operating Plan:

a. The Contractor shall prepare a monthly operating plan that outlines what scheduled work is anticipated to be completed during the following month. This plan will include all scheduled inspection, service or maintenance work items.

b. The monthly operating plan will be submitted to the CO or his authorized representative by the first of the month.

c. Any deviations from the operating plan will be coordinated with the CO or his authorized representative as necessary.

TP – 2.20 Insurance:

a. The Contractor shall procure not less than the following types of insurance in the amount indicated:

Type	**Minimum Amount**
Workman's Compensation Insurance	As required by State law
Employer's Liability Insurance	$100,000
Comprehensive General Liability Insurance	$500,000 B.I.
Comprehensive Automobile Liability Insurance	$200,000/$500,000 B.I. $20,000 P.D.

The insurance certificate shall contain the following endorsement: "Cancellation or any material change in the policies adversely affecting the interests of the Government in such insurance shall not be effective for such period as may be prescribed by the laws of the state in which the contract is to be performed and in no event less than 30 days after written notice thereof to the Contracting Officer.'

Technical Provisions
Section TP - 3
General Demolition & Construction

TP – 3.1 Scope of Work:

a. The Contractor shall supply all labor, materials and supplies and equipment necessary to perform general demolition and construction of partitions, ceilings, doors, painting, carpeting, and associated electrical services at SSCOM.

b. Work shall include, but not be limited to, the demolition and disposal of existing partitions, ceilings, carpeting, doors, and electrical fixtures to be removed and properly disposed of in preparation for new construction.

c. The Contractor is responsible for the proper disposal of demolition debris and the clean up and removal of all waste material generated during demolition or construction. Government-owned dumpsters shall not be used for disposal of demolition or construction debris.

d. The Contractor shall perform all work in accordance with the specific quantities, colors, locations, and delivery schedules set forth in Task Orders issued by the CO or his authorized representative. All work, including normal hours, overtime or emergency response shall be accomplished in accordance with the specifications and the Schedule of Supplies or Services.

TP – 3.2 Selective Demolition:

a. Contractor shall supply all labor, tools and equipment necessary to ensure the adequate protection of finished areas of the building by the use of poly tarps, etc. so that no visible dust will migrate into areas not under construction.

b. Contractor will be responsible for the cleanup of hallways or other areas that can not be protected by physical barriers. All work areas shall be cleaned at the end of each workday so that no visible dust or debris remains.

c. Contractor shall coordinate the placement of refuse containers or dumpsters with the CO or his authorized representative.

TP – 3.3 Drywall Partitions:

Contractor shall provide all labor, materials, supplies and equipment necessary to install non-load bearing drywall partitions. All partitions to be 3 5/8”, 25 gauge studs at 16” o. c. with 3 1/2”, full height R11 fiberglass batt insulation installed between studs. Wallboard shall be applied parallel or perpendicular to face of 3 5/8” studs with joints staggered as per manufacture instruction. Gypsum wallboard (G.W.B.) to be taped, joined and finish sanded in preparation for painting.

TP – 3.4 Ceilings:

a. The Contractor shall provide all labor, material and equipment necessary to install ceiling systems. Installation of ceiling systems shall comply with ASTM C636 for all ceiling tiles, grid suspension system, acoustical/insulation materials, diffusers, and hangers and supporting hardware.

b. Fire-rated systems shall have "Intermediate" or heavy-duty classification – select grid systems rated main and cross tees, acoustical tiles and insulation (Due to cost, this is not a high-use item in concrete and block office spaces).

TP – 3.5 Doors and Doors Frames:

Contractor shall supply all labor, material, and equipment necessary to install doors and frames in partitions. All doorjambs shall have double studs screwed or tack-welded together. All door headers shall be sized for span and bearing support as required to transfer all superimposed loads to vertical supports. All fire rated doors and jambs to be labeled and have UL approved hardware, excluding lockset.

TP – 3.6 Electrical:

a. Contractor shall complete all work in accordance with the current edition of the National Electrical Code, State amendments and manufacturers published requirements for all devices used to perform contract work. Such devices may include, but are not limited to, fluorescent and incandescent fixtures, receptacles, switches, raceways, cables, outlet boxes, J-boxes and other devices needed to accomplish assigned tasks.

b. Fluorescent fixtures, the majority being parabolic louvered, electronic ballast, operating at 120 volts AC using T8 lamps for compact U-shaped and 4' applications. Doorframes to be flush, with louvers measuring 3" deep with a semi-specular silver finish and matte black accent along doorframe perimeter. Troffer and surface fixtures sizes and cell configuration being 1'x 4' with 8 cells, 2'x 2' with 16 cells and 2'x 4' with 16 or 31 cells, as designated by the CO or his authorized representative. In some cases, fixtures with acrylic lens will be used with the same electronic specs as parabolic fixtures. Fluorescent lamps and PCB ballasts shall be treated as Universal Waste and treated according to MADEP requirements.

c. Incandescent fixtures to be "R" series reflector, lamp baffle and wall wash, 120 volt AC., 150 watt max, 7" diameter using par 30 lamps.

d. Unless otherwise indicated, wiring shall consist of insulated copper conductors installed in electric metallic tubing or MC metallic cable. All conductors to be terminated in approved metal boxes, devices, etc. with all exposed metal parts grounded. All circuits rated at 120 volts, 20 amp, 600 volt rating.

e. Contractor will be responsible for installing circuit breakers in existing power panels with feeders averaging 40 to 60 feet. All breakers to be labeled at panel and J-boxes. Switches, single pole and 3-way to be rated 210 amp, 120 to 277 volt AC., side and back wired and UL approved. Receptacles to be 20 amp, 125 volts AC., NEMA 5-20R, side and back wired and UL approved.

TP – 3.7 Painting:

The Contractor shall provide all labor, materials and equipment necessary to prepare and paint all occupied and unoccupied spaces in accordance with locations and specifications identified by the CO or his authorized representative.

TP – 3.8 Carpet and Tile:

a. Contractor shall proved all carpeting, tile, labor, materials and equipment necessary to perform all work orders as outlined in the contract bid line items identified in this contract.

b. Carpeting shall be glued down with a minimum amount of glue necessary to prevent carpet from stretching, buckling and holding pockets of air so that the carpet can be easily removed in the future.

c. When removing carpet that has been glued down to vinyl asbestos tile (VAT) the Contractor shall follow the following procedures:

1. As carpet is being pulled back from tiles, the contractor shall spray the top of the exposed VAT and back of the exposed carpet with a pressurized industrial or garden type sprayer, ensuring adequate wetting sufficient to eliminate airborne dust.

2. Double wrap carpet with 6-mil polyethylene and tape closed with duct tape before removing old carpet from the room. Do not drag carpet over concrete or other rough surfaces. Dispose of carpet at the dumpster location designated by the COR at a location behind warehouse, Building #20. It carpet has come up without removing or breaking any VAT then the Contractor does not need to wrap the carpet before disposing.

3. Hand bag, in double 6-mil polyethylene bags all large pieces of VAT. HEPA vacuum all smaller pieces and dust the entire floor in room. Remove bags and carpet from building and dispose of in the designated dumpster.

Note* If more than 25% of the VAT is coming up broken, or more than 10% is coming up disintegrated when removing any carpet, the Contractor will stop work and inform the CO or his authorized representative.

Technical Provisions
Section TP - 4
Preventative Maintenance

TP – 4.1 Scope of Work:

a. Contractor shall provide all labor, tools and equipment necessary to provide general preventive maintenance and emergency service to all Government buildings located at SSCOM as called out in issued task orders.

b. Government-furnished materials and supplies (when available) may be picked up at the Public Works Directorate (DPW) office in Building # 45 between the hours of 7:00 a.m. and 5:30 p.m. Eastern Standard Time.

c. Where surplus government-furnished parts and materials are not available, the Contractor shall supply all materials and supplies necessary to complete assigned Task Orders.

TP – 4.2 Electrical:

Contractor shall perform preventive maintenance, electrical maintenance and repair to include, but not limited to, installation and replacement or cover plates, ballasts, light bulbs, light fixtures, emergency lights, and exit lights, etc. Fluorescent lamps and PCB ballasts shall be treated as Universal Waste and treated according to MADEP requirements.

TP – 4.3 Carpentry:

Contractor shall perform carpentry work to include, but not limited to, installation, replacement, and repair of doors, walls, locks, floor tile, siding, door frames, door closures, storm doors, windows, screens and ceramic wall tile and all other manners of light carpentry, etc.

TP – 4.4 General Maintenance and Repair:

Contractor shall perform general maintenance and repairs to included, but not limited to, installation and replacement of window shades, blinds and brackets. Also, ceiling and wall fans with some dry wall repair not to exceed 100 square feet; spackling and spot painting not to exceed 400 square feet; and all types of ceiling tiles. Also included is hanging of pictures, dispensers, bulletin boards, wall brackets and door signs. Other items include removal and relocation of key boxes, etc.

TP – 4.5 Plumbing:

Contractor shall perform plumbing maintenance and repair to include, but not limited to, cleaning of blocked toilets, sinks, drains and repair of leaks. Maintenance includes installation, replacement and repair of sinks, toilets, garbage disposals, showerheads, mixing valves, vanities and faucets, etc.

Technical Provisions
Section TP - 5
Cooling Tower & Chemical Treatment

TP – 5.1 Scope of Work:

Contractor shall furnish all labor, materials, and equipment necessary to provide full maintenance, emergency services, inspection and chemical treatment of Government-owned cooling towers as specified herein. The following work described applies to cooling towers and components including, but not limited to, drive belts, fans, pumps, electric motors, variable frequency drives, valves, operators and controls.

TP – 5.2 Weekly Operation and Maintenance:

a. Cooling tower water samples shall be taken and tested for the proper amounts of corrosion and scale inhibitors, biocides, conductivity, hardness and pH levels. pH levels shall be maintained between 7.5 and 8.5. Corrosion coupons shall be used in each cooling tower to help determine the proper amounts of scale and corrosion inhibitors. Contractor shall utilize spill pallets or other protection to minimize the potential of releases or spills.

b. Sump heater operation shall be checked on a weekly basis from the first week of November through the last week of April.

c. During the cooling season, the Contractor shall visually inspect each tower, fan, fan motor, pump, pump motor and fan belt on a weekly basis.

TP – 5.3 Monthly Inspection & Maintenance:

a. Check for excess vibration and noise on fans, pumps and motors and adjust as needed.
b. Adjust, align and replace fan belts as required.
c. Check fan bearings and lubricate as required.
d. Check pump seals and/or packing and adjust, repair or replace as required.
e. Check operation of basin heaters and heat tapes.
f. Check water level in tower basins.
g. Check for proper operation of tower make-up water float valves/solenoids.
h. Check oil levels in motors and gear reducers.
i. Check for proper operation of all controls.

TP – 5.4 Semi-Annual Inspection & Maintenance:

a. Lubricate fan motors as required.
b. Clean basins.
c. Check and clean basin-heating elements of deposits (stainless steel brush only).
d. Check and clean all water strainers.
e. Check and clean all spray nozzles.

TP – 5.5 Parts Replacement:

a. During the process of performing maintenance service or emergency services, the Contractor shall supply, repair and replace any worn, damaged or broken parts immediately. Only parts that are correctly designed and suitable in all respects shall be used. Only parts inspected and concurred on by the CO or his authorized representative will be paid. The Government will not be liable for repairs made necessary by negligence, accident or misuse by the Contractor.

b. The Contractor shall have and maintain, on-hand locally, a supply of suitable spare parts for the normal service, maintenance and repair of cooling towers.

TP – 5.6 Equipment List:

The number and location of cooling towers, pumps, pump motors, fans and fan motors listed below is approximate. Any discrepancy between these figures and actual equipment on-site will in no way relieve the contractor for the necessity of furnishing any materials or performing any work that may be required to complete contract Task Orders.

Building No.	Building	Tons	Towers	# Fans	# Pumps
No. 1	Headquarters	200	2	2 – 15 HP	2 – 25 HP
No. 2	Climatic Chambers	400	2	2 – 20 HP	2 – 50 HP
No. 3	Research	85	1	2 – 2 HP	2 – 10 HP
No. 3	Research	400	2	2 – 30 HP	3 – 40 HP
No. 4	Development	200	2	2 – 15 HP	2 – 30 HP
No. 5	Shop Building	75	1	1 – 5 HP	2 – 10 HP
No. 7	Navy Building	150	1	1 – 15 HP	2 – 10 HP
No. 16	Food Service Building	75	1	1 – 5 HP	2 – 7.5 HP
No. 36	Engineering	200	2	2 – 15 HP	2 – 40 HP
No. 42	Ariem	450	2	2 – 30 HP	2 – 30 HP
No. 45	Lab Support	75	1	1 – 5 5HP	2 – 10 HP

Note: Four (4) cooling towers - one (1) in Building No. 3 (400 ton), one (1) in Building No. 4 (400 ton), one (1) in Building No. 36 (200 ton) and one (1) in Building No. 42 (450 ton) only run during the summer months from May 1 through September 30. Contractor shall be responsible for the shutdown and start-up of all four (4) cooling towers.

Technical Provisions
Section TP - 6
Air Conditioning & Refrigeration

TP – 6.1 Scope of Work:

a. Contractor shall furnish all labor, materials, and equipment needed to provide full maintenance, emergency service, and inspection of air conditioning and refrigeration equipment listed herein or identified in a Task Order. Work applies to all air conditioning and refrigeration system components, including but not limited to, drive belts, oil, refrigerant, filter dryers, air filters, condensers, air compressors**,** evaporators, valves and electric motors listed below.

b. During each scheduled inspection, the Contractor shall clean, adjust, lubricate and repair all parts and equipment for proper maintenance in accordance with the preventative maintenance schedule(s) listed below.

TP – 6.2 Schedule for Annual and Semi-Annual Preventative Maintenance:

a. Work identified in Task Orders and the Schedule of Supplies or Services shall be accomplished on a semi-annual basis during the months of April and October.

b. Work identified in Task Orders and the Schedule of Supplies or Services shall be accomplished on an annual basis during the month of May.

c. All units listed in the contract shall have an additional filter replacement change during the month of August.

TP – 6.3 Schedule for Semi-Annual and Annual Inspection Services:

a. Clean exterior of unit.
b. Check for excess vibration and noise - adjust as necessary.
c. Adjust, align and replace fan belts.
d. Check amount of refrigerant, leak test entire system - repair and recharge as required.
e. Check fan bearings - lubricate as required.
f. Check operation of thermostat control.
g. Check operation of condenser water valve.
h. Clean fan blades, filter chamber, and replace air filters.
i. Clean condensate drainpan and lines.
j. Check return and make up air grills - clean as needed.
k. Check operation of defrost system.
l. Check operation of high and low pressure controls.
m. Check and clean air-cooled condensers.

TP – 6.4 Equipment:

a. The number of units, filters, filter sizes, belts and belt sizes listed for each unit are approximate. Any discrepancy between the figures below and the actual numbers found on-site will not relieve the Contractor from the necessity of furnishing materials or performing any work needed to carry out the work identified in a Task Order.

b. All filters and belts are of nominal sizes.

Building No.	Building	#Units	#Filters	#Belts
1	Headquarters	28	61	12
3	Research	19	35	12
4	Development	34	50	19
5	Shop	9	10	6
7	Navy	9	24	6
8	Communications	1	4	2
15	Barracks	9	4	2
16	Food Services Equipment	9	16	4
20	Warehouse	3	8	2
32	Officer's Club	11	10	3
36	Engineering	36	18	5
38	NCO Club	4	4	0
42	ARIEM	17	11	1
45	Lab Support	14	16	3
86	New Navy	4	20	4
92	Child Development Center	1	1	0
	TOTAL	**207**	**291**	**81**

c. A list of rooms showing where the units are located as well as the approximate size of each unit is provided below**.** Maps showing the room and unit location can also be obtained from the DPW office in Building No. 45.

d. Contractor shall make adjustments in the style and size of each filter or belt necessary to be compatible with the unit and keep a record of all changes. A copy of the changes shall be provided to the CO or his authorized representative.

TP – 6.5 Refrigerant Recovery:

a. Contractor shall use the latest approved methods of refrigerant recovery from units that require removal or replacement of refrigerant gases for servicing.

b. Contractor must make every effort to prevent release of refrigerant gases to the atmosphere. Any release of refrigerant gas into the environment or atmosphere at SSCOM shall be reported immediately to the Environmental, Safety and Health office (ESHO) at (508) 223-5993 and to the CO or his authorized representative during normal work hours.

TP – 6.6 Certification:

All Contractor employees working on Government-owned refrigeration or air conditioning equipment shall have a freon recovery certification and be certified as a "Universal Technician" as required by 40 CFR part 82, subpart F.

TP – 6.7 Routine & Non-scheduled Repair Service:

a. During the process of performing maintenance service or emergency services, the Contractor shall supply, repair and replace any worn, damaged or broken parts immediately. Only parts that are correctly designed and suitable in all respects shall be used. The Government will not be liable for repairs made necessary by negligence, accident or misuse by the Contractor.

b. The Contractor shall have and maintain, on hand, a supply of suitable spare parts sufficient for the normal maintenance and repair of the air conditioning and refrigeration units

TP – 6.8 List of Air Conditioning Units to be Inspected & Maintained Semi-Annually:

Building/Unit	**Location**	**Refrigerant**
Headquarters Building No. 1		
1 ton -10° F, Walk-in	Outside Cafeteria	R409a
1 ton 40° F, Walk-in	Cafeteria	R12
1 ½ ton 0° F, Freezer	Cafeteria	R12
40° F, 3 door Reach-in	Cafeteria	R12
40° F, 6 door Reach-in	Cafeteria	R12
10 ton A/C and A/H	Credit Union	R22
15 ton A/C and A/H	Cafeteria	R22
18 ton Liebert A/C	Computer room	R22
5 ton Carrier A/C	Mail room	R22
Air Dryer (Hankinson)	A03	
Air Dryer (Hankinson)	A03	
10 ton Carrier A/C	A07	R22
# 1 A/H Linskey	A07	
# 2 A/H Linskey	A07	
5 ton Carrier heat pump	Teleconference room	R22
2 ½ ton American Standard	A327 - 2nd floor roof	R22
2 ½ ton Carrier Heat Pump	Legal conference room	R22
Research Building No. 3		
7 ½ ton Carrier A/C	R227	R22
1 ½ ton Skil-Air A/C	202A	R22
1 ½ ton Skil-Air A/C	202A	R22
5 ton Carrier A/C	R226	R22
1 ton Carrier A/C	R214 (telephone hub room)	R22
5 ton Carrier A/C	R338	R22
2 ton 40° F, Walk-in	R235	R22

5 ton 0° F, Walk-in	R235	R22
Development Building No.4		
Air Dryer #1	OM3	
Air Dryer #2	OM3	
A/H	OM3	
5 ton -10° F, Freezer	D034	R404a
5 ton -20° F, Freezer	D032	R404a
3 ton 0° F, Freezer	D036	R404a
2 ton 40° F, Walk-in	D033/037	R22
1 ton 40° F, Walk-in	D038	R22
1 ¼ ton Walk-in	D035/039	R22
1 ton 70° F, Walk-in	D040	R22
5 ton Curtis A/C	D129	R22
5 ton Carrier A/C	D245	R22
7 ton Carrier A/C	D222	R22
7 ton Carrier A/C	D222	R22
1 ton Carrier A/C	D227A (telephone hub room)	R22
5 ton Carrier A/C	D128A	R22
Shop Building No. 5		
5 ton Carrier A/C	S136	R22
15 ton York A/C	Mezzanine	R22
10 ton Trane A/C	S122	R22
Air Dryer	S111	
3 ton Carrier A/C	S126 - ceiling	R22
Navy Building No. 7		
2 ton York A/C and A/H	105	R134a
5 ton A/C and A/H	5	R22
10 ton A/C and A/H	11	R22
10 ton Carrier roof top	roof	R22
5 ton Trane A/C	1st floor	R22
Barracks Building No. 15		
1 ton 40° F, Walk-in	Outside	R12
2 ton 0° F, Walk-in	Outside	R12
40° F, Reach-in	Kitchen	R12
40° F, 3 Door Reach-in	Kitchen	R12
Ice machine (Manatowic)	Dining Area	R12
Refrigerated Table	Dining Area	R12
0° F, Reach-in	Kitchen	R12
Food Equipment Building No. 16		
1 ½ ton 50° F, Walk-in	Platform	MP39
1 ton 40° F, Walk-in	Platform	R12
Warehouse Building No. 20		
3 ton Walk-in Freezer	Loading Dock	R12
Officer's Club Building No. 32		
1 ton 40° F, Walk-in	Outside	R12
3 ton 10° F, Walk-in	Outside	R12
1 ton Reach-in Freezer	Kitchen	R12

5 door Freezer (Jordan)	Kitchen	R12
Salad Bar (Franke)	Kitchen	R12
1 ton 2 door (Bevergair)	Kitchen	R12
Ice cuber (Manatowic)	Basement	R12
Ice cuber (Scotsman)	Main Bar	R12
Engineering Building No. 36		
5 ton Walk-in (box 44)	E128/129	R22
3 ton Walk-in (box 48)	E135	R22
1 ton Walk-in (box 47)	E134	R22
1 ton 40° F, Walk-in	E137	R22
¼ ton Air Dryer	E148	
¼ ton Air Dryer	E148	
Dehumidifier (Cargocaire)	E133	
Dehumidifier (Cargocaire)	E133	
5 ton D/B and A/C	Clean room	R12
2 ton D/B and A/C	Clean room	R12
3 ton D/B and A/C	Clean room	R12
5 ton Freeze dryer	E203	R22
5 ton Blast freezer	E203	R22
5 ton Carrier A/C	E205	R22
3 ton -20° F, Walk-in	Back - Building No. 16	R502
3 ton -10° F, Walk-in	Back - Building No. 16	R502
3 ton -20° F, Walk-in	Back - Building No. 16	R502
3 ton Carrier A/C	E111 - ceiling	R22
3 ton Carrier A/C	E116 - ceiling	R22
20 ton Blast freezer	E144	R502
7 ½ ton Holding freezer	E133	R404a
Ice machine (Kitchen)	E133	R12
2 ton 40° F, Walk-in	Back - Building No. 16	R12
2 ton 40° F, Walk-in	Back - Building No. 16	R12
NCO Club Building No. 38		
1 ton 40° F, Walk-in	Outside	R12
ARIEM Building No. 42		
10 ton D/B water chiller	030 - pool	R22
1 ton Koldwave A/C	030	R22
1 ton Carrier Heat Pump	139 - ceiling	R22
1 ton Carrier Heat Pump	140 - ceiling	R22
2 ½ ton Carrier H/P	124	R22
15 ton Liebert A/C	155	R22
10 ton Carrier A/C	144	R22
½ ton 40° F, Walk-in	331	R409a
2 ton 40° F, Walk-in	351	R409a
5 ton Carrier A/C	Roof	R22
1 ton McQuay H/P	131	R22
1 ton McQuay H/P	132	R22
2 ton 0° F, Walk-in	222A	R409a
2 ton 0° F, Walk-in	223A	R409a
1 ton 40° F, Walk-in	222	R409a
1 ton 40° F, Walk-in	223	R409a
1 ton McQuay H/P	232	R22

Lab Support Building No. 45		
D/B and A/H	136	
10 ton Carrier A/C	108	R22
Air Dryer	136	
10 ton Liebert A/C	Reproduction	R22
New Navy Building No. 86		
10 ton Carrier A/C	Roof	R22
15 ton Carrier A/C	Roof	R22
12 ton Carrier A/C	Roof	R22
10 ton Carrier A/C	Roof	R22
Child Dev. Center Building No. 92		
5 ton A/C (air cooled)	Outside	R22

TP – 6.9 List of Air Conditioning Units to be Inspected & Maintained Annually:

Building/Unit	**Location**	**Refrigerant**
Headquarters Building No. 1		
2 ton Koldwave A/C	A023	R22
12 ton Carrier A/C	1st floor South	R22
12 ton Carrier A/C	1st floor South	R22
3 ton Carrier A/C	A107	R22
16 ton Carrier A/C	2nd floor South	R22
16 ton Carrier A/C	2nd floor North	R22
15 ton Carrier A/C	A301	R12
25 ton Trane A/C	East addition entrance	R22
3 ton Trane A/C	East addition entrance	R22
10 ton Liebert A/C	East addition entrance	R22
Research Building No. 3		
5 ton Carrier A/C	R125	R22
5 ton Trane A/C	R111	R22
5 ton Carrier A/C	R220	R22
3 ton D/B and A/C	R308	R22
2 ton Mitsubishi A/C	R342B	R22
5 ton York A/C	R321	R22
3 ton Environmental Chamber	R029A	R12
5 ton Environmental Chamber	R029B	R12
3 ton Environmental Chamber	R029C	R12
12 ton Carrier water chiller	OM1	R22
5 ton Carrier A/C	R313	R22
Development Building No. 4		
5 ton Curtis A/C	D116	R22
5 ton Carrier A/C	D115	R22
5 ton Carrier A/C	D113	R22
5 ton Curtis A/C	D118	R22
5 ton Curtis A/C	D122	R22
5 ton Carrier A/C	D125A	R22
5 ton Carrier A/C	D128	R22
5 ton Carrier A/C	D223	R22

7 ½ ton Carrier A/C	D241	R22
1 ton Sanyo A/C	D220	R22
7 ½ ton Carrier A/C	D307	R22
5 ton York A/C	D308	R22
3 ton Curtis A/C	D314	R22
3 ton Carrier A/C	D335	R22
7 ½ ton Carrier A/C	D323	R22
5 ton Trane A/C	D300	R22
Shop Building No. 5		
2 ton Window A/C	S101	R22
5 ton Carrier A/C	S128	R22
15 ton Carrier A/C	Tentage	R22
5 ton Carrier A/C	S140	R22
Navy Building No. 7		
7 ½ ton Trane A/C	104	R22
7 ½ ton Trane A/C	104	R22
7 ½ ton Trane A/C	100	R22
7 ½ ton Trane A/C	105	R22
Communication Building No. 8		
15 ton Trane Water Chiller	Outside	R22
Barracks Building No. 15		
15 ton Trane Water Chiller	Outside	R22
5 ton Carrier A/C	Outside	R22
Food Service Building No. 16		
5 ton Carrier A/C	120	R22
7 ton Carrier A/C	122	R22
15 ton York A/C	Cell room	R22
30 ton Trane A/C	1M2	R22
25 ton Trane roof top	Roof	R22
7 ½ ton Trane roof top	Roof	R22
7 ½ ton Trane roof top	Roof	R22
Warehouse Building No. 20		
7 ½ ton Carrier A/C	Mechanical room	R22
7 ½ ton Carrier A/C	Roof	R22
Health Clinic Building No. 30		
3 ton Carrier A/C	Ariem Annex	R22
Officer’s Club Building No. 32		
10 ton Carrier A/C	Main ballroom	R22
10 ton Carrier A/C	Main ballroom	R22
5 ton Carrier A/C	Lower level	R22
Engineering Building No. 36		
5 ton Carrier A/C	E110	R22
3 ton Carrier A/C	E111 - ceiling	R22
3 ton Carrier A/C	E116 - ceiling	R22
3 ton Carrier A/C	E114 - ceiling	R22
3 ton Carrier A/C	E167	R22

5 ton Carrier A/C	E166	R22
15 ton D/B water chiller	Mezzanine	R22
10 ton Victory Blast Freezer	E133	R404a
25 ton Carrier A/C	E162	R22
¾ ton Heat Pump	133 - Display area	R22
Cargocaire dehumidifier	Mezzanine	
Cargocaire dehumidifier	Mezzanine	
NCO Club Building No. 38		
5 ton Carrier A/C	Outside	R22
5 ton Carrier A/C	Outside	R22
5 ton Carrier A/C	Outside	R22
Instrumentation Building No. 44		
10 ton Carrier A/C	Mechanical room	R22
Lab Support Building No. 45		
10 ton D/B, A/C and A/H	136	R22
7 ½ ton Carrier A/C	104	R22
20 ton Carrier A/C	136	R22
1 ton Koldwave A/C	117G	R22
10 ton Carrier A/C	Basement	R22
1 ½ ton Skil-air A/C	Basement	R22
20 ton York A/C	Basement	R22
7 ½ ton York A/C	Basement	R22
1 ½ ton Heat Pump	Basement	R22
1 ½ ton Heat Pump	Basement	R22

TP – 6.10 List of Air Compressors Units to be Inspected & Maintained Semi-Annually:

Building No.	**#Units**
1	2
2	1
3	2
4	2
5	1
7	1
15	2
16	2
19	2
30	1
36	2
42	2
45	1
77	1
78	2
Total	24

Technical Provisions
Section TP – 7
Air Filter Service & Maintenance

TP – 7.1 Scope of Work:

a. Contractor shall furnish all labor, supplies, materials and equipment to service, maintain and replace air filters in accordance with the specifications of this contract.

b. Contractor will remove dirty filters, install clean air filters, clean grease filter, remove spent filters from the premises.

c. Contractor shall make adjustments in the style or sizes of each filter if needed to be compatible with the unit type and keep a record of the changes.

d. Contractor shall determine if the style and size of filters presently being used are the most efficient for the unit and make recommendations on upgrading and/or replacing filtration.

e. Contractor shall supply sufficient and necessary supplies and equipment for completion of this contract including, but not limited to, filters (as specified below or the equivalent) roll media, ladders, tools, etc.

f. Contractor shall completely service, maintain or replace all filters in an entire building before proceeding to the next building.

TP – 7.2 Asbestos Caution:

Due to the presence of Asbestos Containing Material (ACM) in some ceiling areas, the Contractor, before doing work above ceilings, check with the CO or his authorized representative.

TP – 7.3 Types of Filters:

a. Disposable Panel Filters: Shall consist of a metal retainer with reduced resistance to allow a heavier, more efficient media pad to be used while maintaining, low resistance and a premium grade of continuous filament fiberglass media.

b. Extended Surface Pleated Filter: Shall consist of a heavy-duty frame made of high strength, moisture resistance “beverage” board. Media pack support retainers shall be bonded to the pleats in such a way that spacing between the pleats allows for maximum dust holding capacity while maintaining resistance. Pleated media shall be bonded to the inside of the frame to prevent leakage and increase rigidity.

c. Extended Surface Positive Filter: Shall be built with metal sides and a single piece steel header and contain ultra-fine fiberglass media.

d. Dri-Pak Filter: Shall be of medium efficiency, nonsupport pocket type, consisting of galvanized steel holding frame and replaceable filter.

e. Grease Filters: Shall be able to collect grease and other foreign objects generated during cooking.

f. Carbon Filters: Shall be able to freshen the air by removing gasses and vapors as the contaminated air passes through activated carbon filters. The filter shall have a U-channel steel frame with steel container on both sides that contain the granules of activated carbon.

g. Roll Media: Cut-to-Size filters for room air conditioning specially designed to trap dust and lint.

TP – 7.4 Work Area:

A list of rooms where filtering units are located, the sizes, styles and number of filters currently being used for each type of unit is provided below**:**

TP – 7.5 Filter List – Building No. 1:

Bldg #	Room #	Code	Make	Model #	Filter Size	Qty	Style
1	Café	AH	Trane		15x20x2	8	E
1	Café	AH	Trane		16x25x1	4	E
1	30	GH	Grease Hood		20x30x2	14	G
1	28	GH	Grease Hood		12x19x1	2	G
1	AUD	GH	US Air	VBC-215	16x22x2	8	E
1	AUD	GH	US Air	VBC-215	16x22x2	8	E
1	302	PTAC	Wall Unit		7 ½x44x1	1	D
1	304	PTAC	Wall Unit		7 ½x44x1	1	D
1	306	PTAC	Wall Unit		7 ½x44x1	1	D
1	308	PTAC	Wall Unit		7 ½x44x1	1	D
1	310	PTAC	Wall Unit		7 ½x44x1	1	D
1	312	PTAC	Wall Unit		7 ½x44x1	1	D
1	314	PTAC	Wall Unit		9x31x1	1	D
1	315	PTAC	Wall Unit		7 ½x57 ½x1	2	D
1	317	PTAC	Wall Unit		7 ½x57 ½x1	2	D

Total Filter Count for Building No.1

8 – 15x20x2
4 – 16x25x1
16 – 16x20x2
6 – 7 ½x44x1
1 – 9x31x1
4 – 7 ½x57 ½x1

TP – 7.6 Filter List – Building No. 3:

Bldg #	Room #	Code	Make	Model #	Filter Size	Qty	Style
3	312	TB		1	16x20x2	2	E
3	312	TB		2	16x20x2	2	E
3	312	TB		3	16x20x2	2	E
3	312	TB		4	16x20x2	2	E
3	331	AP	Ecology	Tech	18x24x.5	1	D
3	331	AP	Ecology	Tech	18x24x.5	1	D
3	331	AP	Ecology	Tech	18x24x.5	1	D
3	lst Floor	PTAC	Wall Unit		See Chart		D
3	2nd Floor	PTAC	Wall Unit		See Chart		D
3	3rd Floor	PTAC	Wall Unit		See Chart		D

Total Filter Count - Building No. 3

8 - 16 x 20 x 2
3 - 18 x 24 x .5
207 - 7 ½ x 43 x 1
4 - 8 x 40 x 1
4 - 7 ½ x 41 x 1

TP – 7.7 Building No. 3 – Wall Unit Chart:

Room	Qty	Size	Room	Qty	Size	Room	Qty	Size
100	2	C	133	2	C	217	2	C
102	2	C	134	2	C	219	1	C
104	2	C	136	3	C	221	1	C
106	1	C	143	1	A	222	1	C
106A	2	C	144	1	C	224	1	C
108	1	C	145	2	A	225	3	C
109	1	C	146	3	C	230	3	C
110	1	C	147	1	A	231	2	C
112	2	C	W/Ent	2	C	232	1	C
113	2	C	E/Ent	2	C	233	2	C
114	2	C	E End	2	C	234	1	C
115	2	C	200	2	C	235	1	C
116A	1	C	201	1	C	236	2	C
116C	1	C	202	1	C	238	2	C
116D	1	C	202 A	2	C	240	3	C
117	1	C	202 B	2	C			
118	2	C	203	2	C	242	2	C
119	1	C	204	1	C	244	2	C
120	2	C	205	2	C	246	2	C
123	1	C	206	1	C	Ld Rm.	1	B
126	1	C	207	1	C	Mn Rm.	1	B
128	1	C	208	7	C	W/Ent	1	C
128B	4	C	209	1	C	E/Ent	1	C
129	3	C	211	2	C	300	4	C
131	1	C	213	2	C	301	3	C
132	2	C	215	3	C	303	1	C
304	4	C	319	2	A	337	1	C
305	2	C	321	3	C	338	2	C
306	2	C	322	1	C	339		C
306B	1	C	324	2	C	340	3	C
306C	1	C	325	1	C	341	2	C
307	2	C	326	1	C	342	2	C
309	2	C	327	1	C	342B	1	C
310	2	C	328	1	C	343	3	C
311	3	C	329	3	C	344	3	C
312	1	C	325	3	C	Ld Rm.	1	B
313	1	C	326	3	C	Mn Rm.	1	B
315	2	C	327	2	C	W. Ent.	1	C
316	1	C	328	4	C	E. Ent.	1	C
317	1	C	329	2	C			

Total Wall Unit Filters - Building No. 3

A = 8 x 4 0 x 1	A = 4
B = 7 ½ x 41 x 1	B = 4
C = 7 ½ x 43 x 1	C = 207

TP – 7.8 Filter List – Building No. 4:

Bldg #	Room #	Code	Make	Model #	Filter Size	Qty	Style
4	27	AC	Carrier		16x24x1 20x24x1	1/1	E
4	43	AH	Carrier		16x25x2	15	E
4	OM3	HV5			16x20x2	8	E
4	031	HV	McQuay		16x20x2	1	E
4	130	GH			11 ½x33x1	5	D
4	133	DF			8 ½x8 ½x1	9	M
4	133A	DF			8 ½x8 ½x1	3	M
4	135	FH			12x24x1	2	G
4	135	DF			9x23x1	6	M
4	135A	DF			8 ½x8 ½x1	1	M
4	137	GH			20x20x2	4	G
4	137	DF			9x23x1	4	M
4	1st Floor	WU	Wall Unit		See Chart		D
4	2nd Floor	WU	Wall Unit		See Chart		D
4	3rd Floor	WU	Wall Unit		See Chart		D

TP – 7.9 Filter List – Building Nos. 5, 7, 8, 16 & 30:

Bldg #	Room #	Code	Make	Model #	Filter Size	Qty	Style
5	105	AH	McQuay		16x20x2	2	E
5	125	F	Atlas		12x33x1	4	W
5	126	A/H	Skil-air		20x20x1	1	W
5	Roof	RTU	Trane		20x25x2	8	E
5	Roof	RTU	Trane		20x20x2	8	E

Total Filter Count – Building No.5

2 - 16x20x2
8 - 20x20x2
8 - 20x25x2

Bldg #	Room #	Code	Make	Model #	Filter Size	Qty	Style
7	104	F	Atlas		12x33x1	1	W
8	--	WU	Wall Unit		7 ½x43x1	9	D
16	1M2/ME2	AH	Westinghouse		16x20x2	6	E
16	1M2/ME2	AH	Westinghouse		16x20x2	6	E
16	116	AH	Lennox		16x24x1	3	D
16	Roof	RTU			20x20x2	12	E

Total Filter Count – Building No.16

12 - 16x20x2
3 - 16x24x1
12 - 20x20x2

Bldg #	Room #	Code	Make	Model #	Filter Size	Qty	Style
30	110	AH	McQuay		16x20x2	1	E
30	114	AH			20x20x2	2	E

TP – 7.10 Filter List – Building No. 36:

Bldg #	Room #	Code	Make	Model #	Filter Size	Qty	Style
36	118	AC	Carrier		16x25x1	2	E
					16x20x2	9/8	E
36	133	AH	McQuay		20x25x2		E
36	133	GH	Grease Hood		20x20x2	5	G
36	137	GH	Grease Hood		20x20x2	5	G
36	162	AH	McQuay		20x25x2	4	E
36	163	AH	McQuay		20x25x2	6	E
36	201	DH	Dry-o-matic		16x20x1	1	D
36	201	DH	Dry-o-matic		6x12x1	1	D
36	204	AH	McQuay		16x20x2	12	E
36	206	DH	Curtis		6x12x1	1	E
36	206	AC	York		16x25x1	2	E
36	Me2	AH	Dunn-Bush		20x20x2	6	E
36	Me2	DH	Cargo-Air		12x12x2	1	D
36	Me2	DH	Cargo-Air		12x12x2	1	E
36	Me2	AH	Dunn-Bush		16x20x2	6	E
36	Mech Room	AH			20x25x2	14	E
36	Mech Room/Me2	AH			16x20x2	12	E
36	Mech Room/Me2	AH			16x20x2	12	E

Total Filter Count – Building No. 36

4 - 16x25x1 E
32 - 20x25x2 E
2 - 12x12x2 D
51 - 16x20x2 E
1 - 16x20x1 D
6 - 20x20x2 E
2 - 6x12x1 D

Technical Provisions
Section TP – 8
Exhaust Fan & Fume Hood Maintenance and Repair

TP – 8.1 Scope of Work:

a. The Contractor shall furnish all labor, material and equipment necessary to provide service, maintain and repair fume exhaust hoods, latrine exhausts and building exhausts.

b. During the process of performing normal maintenance or emergency services, the Contractor shall supply, repair and replace any worn, damaged or broken parts. Only parts that are correctly designed and suitable in all respects shall be used. The Government will not be liable for repairs made necessary by negligence, accident or misuse by the Contractor.

c. The Contractor shall have and maintain, on-hand locally, a supply of suitable spare parts for the normal service, maintenance and repair of exhaust fans and fume hoods.

TP – 8.2 Semi-Annual Inspection & Maintenance:

a. The Contractor shall, on a semi-annual basis, inspect and service each of the listed exhaust units. During each semi-annual inspection, the Contractor shall examine, clean, adjust and lubricate each exhaust unit. The Contractor shall also replace any broken or missing screws, or bolts on motor covers, motor mountings or fan mounting hardware.

b. After all maintenance is completed on each exhaust unit, the Contractor shall check flow rates of all Laboratory fume hood exhausts and submit a written report to the CO or his authorized representative.

c. The measurement of flow rates for fume hoods shall be taken at the front of the hood opening at approximately the center.

d. The measurement of flow rates for latrine exhaust systems will be taken at the exhaust grille. The Contractor shall remove and clean each latrine exhaust grill during each inspection.

e. Measurement of flow rate at chase exhaust fans shall be taken at the discharge on the roof. Flow rate shall be measured and reported in linear feet-per-minute.

TP – 8.3 Annual Parts Replacement:

a. During the process of performing maintenance service, the Contractor shall supply and replace all belts once each year on all exhaust units. Any other parts to be replaced such as motors, shafts, bearings, pulleys and motor mounts shall be identified in the inspection report and any replacement approved in advance by the CO or his authorized representative.

b. Service switches for exhaust fans are located on the motors. Before turning off any exhaust unit, the Contractor shall notify all personnel in the room(s) and check if any chemicals are being used in the hoods.

TP – 8.4 Site Investigation and Work Areas:

BUILDING NO.	BUILDING	NO. OF UNITS
1	Headquarters	10
2	Climatic Chambers	6
3	Research	18
4	Development	40
5	Shop	20
7	Navy	9
8	Communications	1 (Inside bldg.), 3 (on roof)
14	Garage	4 (Window unit & walls)
15	Barracks	14
16	Food Service Equipment	12
19	Boiler House	9
20	Warehouse	1 (Inside building)
30	Health Clinic	24
32	Officers' Club	6
36	Food Engineering Lab	17
38	NCO Club	2 (Side exhaust) 1 (Roof unit)
42	ARIEM	23
44	Instrumentation	1
45	Lab Support Services	13
73	Insecticide Storage	2 (Side exhausts)
86	New Navy	1
Total Units:		235

TP – 8.5 Fan List Tables:

BLDG.	ROOM/LOCATION	DECAL	MOTOR HP	RPM	BELT
1	Roof	Men's & Ladies	1/2	1725	4L-290
1	Roof	Battery Room	1/4	1725	4L-290
1	Roof	Men's 1st - 3rd	1/2	1725	4L-290
1	Roof	Ladies 1st - 3rd	3/4	1725	4L-300
1	Lower Roof	Projection Rm.	1/3	1725	Direct drive
1	Lower Roof	Auditorium - Right Side	3/4	1725	Dual 4L-440
1	Lower Roof	Auditorium - Left Side	3/4	1725	Dual 4L-440
1	Lower Roof	Dishwasher #2	1/2	1725	Dual 4L-440
1	Lower Roof	Kitchen #3	3/4	1725	4L-250
1	Lower Roof	Kitchen range #4	1-1/2	1725	4L-440

BLDG.	ROOM/LOCATION	DECAL	MOTOR HP	RPM	BELT
2	Roof	EF-1	1/6	950	3L-190
2	Roof	EF-2	1/12	1750	Direct drive
2	Roof	EF-3	1/12	1750	Direct drive
2	Roof	EF-4	1/12	1750	Direct drive
2	Roof	EF-5	1/12	1750	Direct drive
2	Roof	EF-6	1/12	1750	Direct drive

BLDG.	ROOM/LOCATION	DECAL	MOTOR HP	RPM	BELT
3	220- Roof	26001	1/2	1725	4L-370
3	226- Roof	26160	1/2	1725	4L-290
3	227-Roof	26276	1/2	1725	4L-310
3	228-Roof	26187	1/2	1725	4L-290
3	233-Roof	26252	1/2	1178	4L-290
3	306-Roof	25836	1/2	1725	4L-290
3	311-Roof	30639	1/2	1725	4L-290
3	317-Roof	25536	3/4	1725	4L-430
3	319-Roof	30834	3/4	1725	2420
3	319-Roof	30834	3/4	1725	4L-420
3	324-Roof	19829	1/2	1725	4L-290
3	326-Roof	30717	2	1730	4L-430
3	329-R-Roof	30271	1/2	1725	4L-290
3	329-L-Roof	30272	1/2	1725	4L-290
3	331-Roof	35081	2	1730	4L-450
3	333-L-Roof	30382	1/2	1725	4L-280
3	342-A-Roof	1972	1/2	1725	4L-280
3	342-B-Roof	19657	1/2	1725	4L-280

BLDG.	ROOM/LOCATION	DECAL	MOTOR HP	RPM	BELT
4	112-1-Roof	E1HA-7	1.5	1686	AX26
4	112-2-Roof	E1HC-8	1	2099	AX 26
4	113-Roof	E1HA	1/2	2234	AX 26
4	114-1-Roof	E1HA-30	1	2128	AX 26
4	114-2-Roof	E1HA-27	1	2125	AX 26
4	115-L-Roof	E1HA-32	1	2127	AX 26
4	116-1-Roof	E1HB-22	1.5	1558	AX 26
4	116-2-Roof	E1HB-23	1/2	2777	AX 26
4	118-1-Roof	E1HAB-7	1	2152	AX 26
4	118-2-Roof	E1HB-8	1	2107	AX 26
4	118-3-Roof	E1HB-15	1	2113	AX 26
4	122-1-Roof	E1HC-15	1	2115	AX 26
4	122-3-Roof	E1HC-23	12	2137	AX 26
4	122-4-Roof	E1HC-2	1/2	2313	AX 26
4	127-Roof	E1HC-16	1/2	2080	AX 26
4	129-Roof	E1HC-17	2	1235	AX 26
4	230-Roof	29040	1/2	1725	4L-390
4	300-Roof	NO DECAL	3/4	1918	AX 26
4	302-Roof	E3HA-32	1/2	2172	AX 26
4	307-Roof	E3HA-9	3	1750	4L-410
4	310-1-Roof	E3HA-19	1	1877	AX 26
4	310-2-Roof	E3HA-21	1	1877	AX 26
4	314-Roof	E3HB-3	1	1852	AX 26
4	316-1-Roof	E3HB-13	1	1868	AX 26
4	316-2-Roof	E3HB-11	1	1864	AX 26
4	317-1-Roof	E3HB-15	1	1835	AX 26
4	320-1-Roof	E3HC-1	1	1756	AX 26
4	320-2-Roof	E3HC-3	1	1756	AX 26
4	321-Roof	E3HB-22	1	1771	AX 26
4	322-Roof	E3HB-23	1	1756	AX 26
4	326-1--Roof	E3HC-13	1	1826	AX 26
4	326-2-Roof	E3HC-11	1	1836	AX 26
4	331-1-Roof	E3HC-32	3	1730	4L380
4	331-2-Roof	E3HC-34	3	1730	4L380
4	335-1-Roof	E3HC-21	1	1850	AX 26
4	335-2-Roof	E3HC23	1	1838	AX 26

BLDG.	ROOM/LOCATION	DECAL	MOTOR HP	RPM	BELT
5	Roof	EF-1	1/3	1725	4L-290
5	Roof	EF-2	1/3	1725	4L-250
5	Roof	EF-3	Est. 1-1/2	-	Est. 2560
5	Roof	EF-4	Est. 1-1/2	-	Est. 2560
5	Roof	EF-5	Est. 1-1/2	-	Est. 2560
5	Roof	EF-6	1-1/2	1725	A-38
5	Roof	EF-7	2	1725	2470
5	Roof	EF-8	2	1725	2470
5	Roof	EF-9	3/4	1725	2300
5	Roof	EF-10	2	1725	2430 (dual)
5	Roof	EF-11	2	1725	2470
5	Roof	EF-12	2	1725	2560
5	Roof	EF-13			Direct drive
5	Roof	EF-14	1/2	1725	4L-210
5	Roof	EF-15	1/2	1725	3430
5	Roof	EF-16	1/3	1725	3L-200
5	Roof	EF-17	1/3	1725	3L-200
5	Roof	EF-18	1	1455	A-68 (dual)
5	Roof	Men’s & Ladies	1	1725	2430
5	Roof	Hood Rm. 123	1/2	1725	2430

BLDG.	ROOM/LOCATION	DECAL	MOTOR HP	RPM	BELT
7	Roof	EF-1	3/4	1725	4L-400
7	Roof	EF-2	3/4	1725	2250
7	Roof	EF-3	3/4	1725	2250
7	Roof	EF-4	3/4	1725	2250
7	Roof	EF-5	3/4	1725	4L-400
7	Roof-Room 103	MO2166	1	1725	4L-400
7	Roof-Room 119	MO2120	1/2	1725	4L-300
7	Roof	Men’s & Ladies	1/2	1725	2430
7	Roof	Men’s & Ladies	1/2	1725	2430

BLDG.	ROOM/LOCATION	DECAL	MOTOR HP	RPM	BELT
8	Roof	EF-1	1/2	1725	3500
8	Roof	EF-2	1/2	1725	3500
8	Roof	EF-3	1/2	1725	4L-24
8	Bathroom	EF-4			Direct drive

BLDG.	ROOM/LOCATION	DECAL	MOTOR HP	RPM	BELT
14	Bathroom	Window Unit			Direct drive
14	Side Exhaust		½	1500	Direct drive
14	Side Exhaust		½	1500	Direct drive
14	Side Exhaust		½	1500	Direct drive

BLDG.	ROOM/LOCATION	DECAL	MOTOR HP	RPM	BELT
15	Roof	EF-1			Direct drive
15	Roof	EF-2	1/6-1/8	1725	4L-200
15	Roof	EF-3	1/6-1/8	1725	3L-190
15	Roof	EF-4	1/4	1725	1190
15	Roof	EF-5	1/2	1725	4L-320
15	Roof	EF-6	1/2	1725	4L-320
15	Roof	EF-7	1/2	1725	4L-320
15	Roof	EF-8	1/3	1725	3L-210
15	Roof	EF-9	1-1/2	1725	5L-680 (dual)
15	Roof	EF-10	1/4	1725	Direct Drive
15	Roof	EF-11	1/2	1725	4L-230
15	Roof	EF-12	1/4	1725	3L-180
15	Roof	EF-13	1/16-1/18	1725	3L-190
15	Boiler Room	EF-14	1/4	1725	Direct drive

BLDG.	ROOM/LOCATION	DECAL	MOTOR HP	RPM	BELT
16	Roof Rm.118	20364	1/5	3450	4L-300
16	Roof Rm. 121	20650	3/4	1725	4L-250
16	Roof Rm. 121-A	121-A	1/2	1725	4L-200
16	Roof Rm. 117-A	101212	1	1725	4L-300
16	Roof Rm. 117-B	101222	1	1725	4L-300
16	Roof	Central Cooling	1/2	1725	4L-270
16	Roof Rm. 116	08277	1/2	1725	4L-290
16	Roof	F-1	2	1730	B-53-2 Belts
16	Roof	F-2	2	1730	B-53-2 Belts
16	Lower Roof	F-7	1/2 est.		4L-230
16	Roof	EF-10	1	1725	2330
16	Roof	Men’s & Ladies	1/4	1725	Direct drive

BLDG.	ROOM/LOCATION	DECAL	MOTOR HP	RPM	BELT
19	On Mezzanine		1-1/2	1450	A-46
19	On Mezzanine		1-1/2	1450	A-46
19	On Mezzanine		1-1/2	1450	A-46
19	On Mezzanine		1-1/2	1450	A-46
19	On Mezzanine		1-1/2	1450	A-46
19	On Mezzanine		1-1/2	1450	A-46
19	On Mezzanine		1-1/2	1450	A-46
19	On Mezzanine		1-1/2	1450	A-46
19	On Mezzanine		1-1/2	1450	A-46
20	Inside Warehouse		1/4	1725	4L-290

BLDG.	ROOM/LOCATION	DECAL	MOTOR HP	RPM	BELT
30	Roof	EF-1	1/6	1725	3L-200
30	Roof	EF-2	1/6	1725	3L-200
30	Roof	EF-3	1/6	1725	3L-190
30	Roof	EF-4	1/6	1725	3L-190
30	Roof	EF-5	1/6	1725	3L-200
30	Roof	EF-6	1/8	1725	3L-210
30	Roof	EF-7	1/6	1725	3L-200
30	Roof	EF-8	1/6	1725	3L-190
30	Roof	EF-9	1/6	1725	3L-190
30	Roof	EF-10	1/6	1725	3L-200
30	Roof	EF-11	1/6	1725	3L-210
30	Roof	EF-12	1/6	1725	3L-190
30	Roof	EF-13	1/6	1725	3L-190
30	Roof	EF-14	1/6	1725	3L-190
30	Roof	EF-15 Men's Rm.	1/6	1725	3L-190
30	Roof	EF-16 Ladies Rm.	1/6	1725	3L-190
30	Roof	EF-17	1/6	1725	3L-200
30	Roof	EF-18	1/8	1725	3L-190
30	Roof	EF-19	1/6	1725	3L-200
30	Roof	EF-20	1/6	1725	3L-190
30	Roof	EF-21	1/6	1725	3L-190
30	Roof	EF-22	1/6	1725	3L-190
30	Roof	Hood-Room 103	1	1725	3L-230
30	Roof	Hood-Room 119	1	1725	3L-450

BLDG.	ROOM/LOCATION	DECAL	MOTOR HP	RPM	BELT
32	Roof	EF-1	1	1725	4L-380
32	Roof	EF-2	3/4	1725	4L-300
32	Roof	EF-3	1	1725	4L-360
32	Roof	EF-4	1/2	1140	1200
32	Roof	EF-5	1	1725	
32	Side Exhaust	EF-6	1/2	1725	Direct drive

BLDG.	ROOM/LOCATION	DECAL	MOTOR HP	RPM	BELT
36	Roof	Men's Rm.	1/4	1725	4L-290
36	2nd Floor	Ladies Rm.	1/6	1725	4L-270
36	Roof	163-Hood	2	1725	4L-260
36	Roof	163-A-Hood	3/4	1725	4L-320
36	Roof	136-Hood	1	1725	2380
36	Roof	204	3/4	1725	L-190
36	Roof	205-Hood	3/4	1725	4L-230
36	Roof	Boxshop exh.#2	1/2	1725	2270
36	Roof	Lab exh. #3	1/4	1725	4L-410
36	Roof	Exh. #4	1/4	1725	4L-410
36	Roof	Bakery Hood #8	1/2	1725	4L-380
36	Roof	Bakery Hood #9	1/2	1725	4L-260
36	Roof	Rm. 143 exh. #11	1/2	1725	4L-380
36	Roof	HeLab exh. #6	1/3	1725	4L-410
36	Roof	Exh. #7	1-1/2	1725	2560
36	Roof	Dishwasher	1/2	1725	4L-270
36	Roof	HeLab exh. #5	1/2	1725	4L-440

BLDG.	ROOM/LOCATION	DECAL	MOTOR HP	RPM	BELT
38	Roof	EF-1	1/4	1725	3L-320
38	Side Exhaust	EF-2	1/4	1725	Direct drive
38	Side Exhaust	EF-3	1/2	1725	3L-210

BLDG.	ROOM/LOCATION	DECAL	MOTOR HP	RPM	BELT
42	Roof-Rm.207	207 Hood	1-1/2	1730	4L-320
42	Roof-Rm.203	203 Hood	3/4	1725	4L-250
42	Roof-Rm.210	210-A Hood	3/4	1725	4L-380
42	Roof-Rm.210	201-B Hood	3/4	1725	4L-380
42	Roof-Rm.216	216 Hood	3	1740	4L-440
42	Roof-Rm.219	219 Hood	3	1740	4L-440
42	Roof-Rm.244	244 Hood	3	1740	4L-440
42	Roof-Rm.247	247 Hood	3	1740	4L-360
42	Roof-Rm.301	301 Hood	3/4	1725	4L-280
42	Roof-Rm.304	304 Hood	3/4	1725	4L-230
42	Roof-Rm.343	343 Hood	3/4	1725	4L-230
42	Roof- Chase		1/4	1725	4L-230
42	Roof- Chase		1/4	1725	4L-230
42	Roof- Chase		1/4	1725	4L-230
42	Penthouse	EF-1	1-1/2	1725	A-34
42	Penthouse	E4-Test Chamber	3/4	1725	4L-300
42	Penthouse	E6-Bathrooms	3/4	1725	4L-300
42	Penthouse	E5	1-1/2	1730	H4-S-31
42	Penthouse	E10	3	1760	A-120
42	Penthouse	E11	3	1750	A-120
42	Penthouse	E7	1	1730	BX-83
42	Penthouse	EF-14	1/2	1725	Direct drive
42	Penthouse	EF-15	1/2	1725	Direct drive

BLDG.	ROOM/LOCATION	DECAL	MOTOR HP	RPM	BELT
44	Roof	Men's & Ladies Rm.			Direct drive
45	Roof	EF-1	1/3	1725	4L-300
45	Roof	EF-2	1	1725	4L-410
45	Roof	EF-3	1	1745	4L-400
45	Roof	EF-4	1/2	1725	2430
45	Roof	EF-5	3/4	1725	4L-340
45	Roof	EF-6	3/4	1725	4L-470
45	Roof	EF-7	1/3	1725	4L-300
45	Roof	EF-8	1/3	1725	2400
45	Roof	EF-9	1/2	1725	2260
45	Roof	EF-10	1/4	1725	Direct drive
45	Elect. Shop Rm. 128	4304-R Hood	2	1780	4L-430
45	Elect. Shop Rm. 128	4304-L-Hood	3/4	1725	4L-200
45	Welding Area Rm. 137	E-11	1	3600	Direct drive
73	Side Exhaust	EF-1			Direct drive
73	Side Exhaust	EF-2			Direct drive
86	Roof	Men's & Ladies			Direct drive

Technical Provisions
Section TP – 9
Electrical Maintenance & Repair

TP – 9.1 Scope of Work:

Contractor shall provide preventive maintenance, emergency repairs and routine repairs to all essential electrical building support systems. Contractor shall inspect, test, service, adjust, align, remove, install, replace overhaul, rebuild and repair as necessary to keep and maintain in service all types of electrical equipment and systems. All work shall comply with the National Electric Code, NFPA 70 and shall be performed by a licensed electrician.

TP – 9.2 Monthly Preventive Maintenance:

a. The Contractor shall provide scheduled preventive maintenance on electrical equipment located in building mechanical rooms or designated utility spaces to include special equipment.

b. Preventive maintenance shall be performed annually, semi-annually or monthly as called for in the Task Order and on those items identified in the task order and shall include inspections for the purpose of troubleshooting and diagnostic services.

c. The Contractor shall maintain an equipment log that lists each piece of equipment and identifying existing conditions along with action(s) taken or action(s) proposed.

TP – 9.3 General, Routine and Emergency Repair:

a. Contractor shall provide all labor, materials, equipment and supplies to provide full routine and emergency repair services to Government-owned equipment making use of electrical motors and electrical devices including, but not limited to, associated controls, contactors and relays.

b. The Contractor shall remove, install, replace, overhaul, rebuild or repair as necessary to keep in service all types of electrical equipment and systems listed in the contract.

TP – 9.4 New Construction and Alterations:

a. Contractor shall provide all labor, materials, tools and equipment necessary to install electrical service to new equipment and minor construction. Work may include connecting power circuits to new equipment, connecting dedicated circuits to work stations and general lighting to include switch legs and fixtures.

b. General requirements, unless otherwise indicated, shall consist of insulated stranded copper conductors installed in approved raceways. MC cable can be used with all wires terminating in UL approved metal boxes, devices, etc.; with all exposed parts grounded.

c. Circuit breakers to be installed in existing panels using approved UL rated replacement parts. Average feed runs in office areas are approximately 70’ to 100’.

Technical Provisions
Section TP – 10
High Voltage Electrical System Maintenance

TP – 10.1 Scope of Work:

a. The Contractor shall provide preventive maintenance, emergency repairs and routine repairs to all essential High Voltage electrical building support systems. Contractor shall inspect, test, service, adjust, align, remove, install, replace overhaul, rebuild and repair as necessary to keep and maintain in service all types of electrical equipment and systems.

b. During the process of performing maintenance service or emergency services, the Contractor shall supply, repair and replace any worn, damaged or broken parts immediately. Only parts that are correctly designed and suitable in all respects shall be used. The Government will not be liable for repairs made necessary by negligence, accident or misuse by the Contractor.

c. The Contractor shall have and maintain, on-hand locally, a supply of suitable spare parts for the normal service, maintenance and repair of the high voltage electrical system.

TP – 10.2 Annual Thermographic Inspection and Report:

a. The Contractor shall perform a detailed visual and thermographic inspection of 13.8kv distribution system. System is to be inspected for physical, electrical and mechanical condition. This includes, but is not limited to, all overhead lines and all twelve (12) electrical manholes.

b. The Contractor shall provide a report which includes:

1. A list of problem areas depicted by hot spot location and visual inspection.
2. Thermograph of deficient areas depicted on imaging system.
3. Thermograph shall indicate temperature difference between hot spot and normal reference area.
4. Identifies the cause of the heat rise.
5. A list of areas inspected.
6. An estimated repair cost to correct deficiencies.
7. Condition of manholes and associated wiring.

c. The above inspection will be performed during normal business hours.

TP – 10.3 Annual Overhaul and Maintenance:

a. The Contractor shall inspect and overhaul four (4) Westinghouse B28-B, 15 kV oil circuit breakers (Type FKD 25.8-11000-4, 1,200 amp). Torque all exposed connections, lubricate all moving assemblies and clean contact surfaces. Vacuum cubicles, inspect and repair heaters as needed. Inspect and replace door gaskets as necessary. Lubricate adjust and repair door hinges and latches as needed.

b. The Contractor shall clean insulators and lightning arrestors. Overhaul and lubricate raking mechanism. Re-insulate termination and replace indicating lights as needed.

c. Repair and lubricate two (2) circuit breaker transfer cards.

d. Calibrate and functional test twelve (12) Westinghouse-type CO-9 relays.

e. Calibrate and functional test four (4) Westinghouse-type C0 adjustable inverse time relays (17254-A, V-INV).

f. Clean and lubricate bus instrument transformer and trunion, torque connections and clean main contracts.

g. Contractor shall prepare a written report of work performed and any discrepancies noted which fall outside the scope of this contract. This report shall be submitted to the CO or his authorized representative.

h. All work which requires a shut down of power shall be performed during non-business hours (after 5:30 p.m. weekdays), or on weekends. The CO or his authorized representative will insure ready access to the work areas. Contractor will be responsible for the proper disposition of hazardous waste generated during equipment maintenance or service. An ESHO representative who can be contacted at (508) 233-5056 must sign Hazardous Waste Manifests. The Contractor will provide makeup oil as required.

i. The Contractor shall provide a portable generator for lighting and equipment power when needed.

TP – 10.4 Inspection of Utility Poles:

a. When requested, The Contractor shall inspect wooden utility poles following the described method:

1. Full excavation plus sound and bore. This includes excavating area around the pole 24 inches below grade to inspect the condition of the pole. In addition, sounding with a hammer, as well as taking a boring sample of the wood pole.

2. Provide reports including condition of each pole inspected, as well as proposed recommendations (e.g. remedial treatments, installation of support unit restoration and pole replacement).

b. Contractor will make remedial treatments based upon inspection results. Contractor shall provide recommendations with associated costs on a per pole basis for optional remedial treatments required to extend pole life:

1. Preservative pastes for “shell rot” or surface decay.
2. Fumigants for internal decay.
3. Liquid treatments for internal decay or insect activity resulting in internal cavities.

c. Contractor will provide pole replacement based upon inspection results as authorized by the CO or his authorized representative.

TP – 10.5 Correction of Deficiencies:

Contractor shall provide a written report explaining deficiencies found including a comparison to base-line standards. A ranking shall be included with most serious and dangerous item(s) listed first indicating recommended repair priority for deficiencies found. Approximate costs shall be provided for each repair needed.

TP – 10.6 Transformer Oil Sampling and Analysis:

a. Contractor shall sample eleven (11) oil filled and sixteen (16) silicone filled transformers.

b. Contractor shall analyze each sample according to the transformer performance criteria.

c. Contractor shall provide a written report of the analysis within ten (10) days of the sampling and provide recommendations and prices to correct any deficiencies.

TP – 10.7 Emergency Response to Power Failure:

a. Work shall include, but not be limited to, repair services on cables, switches, fuses, poles, transformer, substations and circuit breakers.

b. All repairs shall be performed by licensed electricians, using the most stringent industry practices and materials, to restore damaged portions or the system to their original condition.

c. The Contractor shall have an exemption issued by the Massachusetts Department of Environmental Engineering, a division of The Water Pollution Control Department, for storage, transportation and service of electrical equipment contaminated by or containing polychlorinated biphenyls (PCBs).

d. Natick drawing # 18-02-02, Sheet 8 or 12, General Electrical Map, is available upon request for estimating purposes only, and shows 13.8 kV distribution raceways and cable. The Contractor will be responsible for verifying the exact layout, location, quantity and sizes.

e. The primary system is 13.8 kV stepped down through transformers to the following types of secondary distribution systems: 2,400 volt, 480 volt, 208 volt, three and four wire, three phase. The Contractor shall be responsible for repair services including, but not limited to, cables, switches, poles, transformers, substations, etc.

f. The Contractor shall be responsible for energizing and de-energizing the damaged portion of the distribution system and the Contractor will perform any tests needed to determine the extent or cause of an outage and to ensure that the system is safe to energize.

g. The Contractor will retain full responsibility for energizing the system. If any damage occurs due to negligence or failure to follow approved procedures, the Contractor shall repair or replace all damaged items and return them to full operation at no additional cost to the government.

Technical Provisions
Section TP – 11
General Plumbing

TP – 11.1 Scope of Work:

a. The Contractor shall supply all labor, materials, equipment, and supplies necessary to perform bi-annual, annual maintenance and routine and emergency repairs to the following, but not limited to, plumbing systems:

1. Plumbing systems
2. Heating systems
3. Gas distribution systems
4. Sewer systems
5. Steam distribution systems
6. Below Grade (underground) utilities

b. The Contractor shall perform routine maintenance and emergency repairs to the following aboveground and below-grade utilities including, but not limited to, plumbing, heating, gas, sewer, and steam systems. These systems include fire hydrants, post indicator valves, backflow prevention devices, steam supply and return pipe lines and various valves and fittings.

c. The Contractor shall provide scheduled preventive maintenance on essential equipment located in building mechanical rooms or designated utility spaces to include special equipment.

d. Preventive maintenance shall be performed on a semi-annual basis.

e. Work to include semi-annual and annual inspection and maintenance of facilities including the repair and replacement of worn or damaged items as identified by the CO or his authorized representative.

TP – 11.2 Parts Replacement:

a. During the process of performing normal maintenance or emergency services, the Contractor shall supply, repair and replace any worn, damaged or broken parts. Only parts that are correctly designed and suitable in all respects shall be used. The Government will not be liable for repairs made necessary by negligence, accident or misuse by the Contractor.

b. The Contractor shall have and maintain, on-hand locally, a supply of suitable spare parts for the normal service, maintenance and repair of the plumbing systems listed above. Contractor shall supply and install only asbestos free gaskets and packing material where asbestos-free substitute materials exist.

TP – 11.3 Semi-Annual Inspection and Maintenance:

The Contractor will perform semi-annual inspection and maintenance on the hydrants and post indicator valves and will include removal of the cap, cleaning of glass indicator windows, gasket inspection (and replacing if necessary), flushing of hydrant, lubricate cap threads and reinstall cap(s).

TP – 11.4 Annual Inspection and Maintenance:

a. The Contractor will perform annual inspection and maintenance on the following valves, including Butterfly, Ball, Gas, diaphragm, globe, OS&Y, Pneumatic, Lever and Gear operated, Mechanical operated, Pressure relief, Temperature relief, Regulator (Oil, Water, Light, Steam) Separator (entrainment eliminator), Steam Traps and Strainers. Valves materials are cast iron, bronze, ductile iron and stainless steel. Valves will be flanged, threaded, soldered or welded. Valve sizes range from 1" to approximately 10" and the pipe sizes range from 1" to 16".

b. Valves will have maintenance performed by means of checking if the unit is operating correctly by opening and closing valve, checking any packing and or gaskets, gears, bolts, nuts, flanges or welds for leaks and wear. Contractor will tighten packing and flange bolts as necessary.

c. The Contractor will clean the exterior of valves. Areas around where work has been performed must be restored to its original condition unless otherwise indicated by the CO or his authorized representative.

d. The Contractor will fill out, maintain, and submit a report and checklist for each building in which valves have been inspected and/or maintained. The Contractor shall document and report any deficiencies found.

TP – 11.5 Maintenance Report:

a. As part of the inspection and maintenance requirements, the Contractor will provide the CO or his authorized representative with the following:

1. A written preventive maintenance report, by building, for all equipment located in building mechanical rooms or designated utility spaces to keep a record for each building involved.

2. The report will include location, description of item, and any inspection, repair, and/or maintenance work performed or proposed.

3. The report shall address each activity including maintenance, repair or replacement of equipment.

TP – 11.6 Routine & Non-scheduled Repair Service:

a. During the process of performing plumbing maintenance service or emergency service as directed by the CO or his authorized representative, the Contractor shall supply, repair and replace all systems as needed.

b. The Contractor shall have and maintain, on hand, a supply or suitable spare parts sufficient for the normal maintenance and repair of the listed plumbing systems.

Technical Provisions
Section TP – 12
Mechanical Maintenance and Repair

TP – 12.1 Scope of Work:

a. Contractor shall provide all labor, materials and equipment to perform preventive maintenance, emergency service and repair of equipment specified below. Pumps include condensate pumps, circulating pumps, sewer ejection pumps, hot water pumps, chilled water pumps and air compressors. Work consists of maintenance and repair of all pump components, electric motors, controls and valves.

b. During the process of performing maintenance service or emergency services, the Contractor shall supply, repair and replace any worn, damaged or broken parts immediately. Only parts that are correctly designed and suitable in all respects shall be used. The Government will not be liable for repairs made necessary by negligence, accident or misuse by the Contractor.

c. The Contractor shall have and maintain, on-hand locally, a supply of suitable spare parts for the normal service, maintenance and repair of all pumps, pump components, electric motors, controls and valves listed below.

TP – 12.2 Semi-Annual Preventive Maintenance:

a. The following items shall be included in semi-annual preventive maintenance:

1. Check pumps and motors for proper operation.
2. Check for leaks on suction and discharge piping, seals, packing glands, etc. Make minor adjustments as required.
3. Check pumps, ejectors and motors operation for excessive vibration, noise and overheating.
4. Check pump controller for proper operation.
5. Check float or pressure controls for proper operation.
6. Lubricate pumps, ejectors and motors.
7. Check alignment of pump and motor, and clearances of shafts and couplers; adjust if necessary.
8. Clean condensate return units, exterior or pumps and surrounding area.
9. Turn in inspection/service/repair report to COR at conclusion of services.

TP – 12.3 Emergency Repairs:

The Contractor shall provide all labor and material necessary to perform emergency repair of the scheduled equipment as directed by the CO or his authorized representative. Labor and material to perform such emergency repairs shall be per the Schedule of Supplies or Services.

TP – 12.4 List of Pumps and Locations:

<u>Building No. 1 - Administration</u>
1 chilled water pumps

2 condensate pumps – 1.5 HP
2 sewer ejection pumps – 2 HP
1 water pump – 1 HP

Building No. 3 - Research
2 condenser water pumps – 1.5 HP
1 chilled water pump – 1/3 Hp
2 sewer ejection pumps – 2 HP
2 condensate pumps – 1.5 HP

Building No. 4 - Developmental
2 condensate pumps – 3 HP
2 condenser water pumps – 30 HP
2 sewer ejection pumps – 2 HP

Building No. 5 - Shop
2 condensate pumps – 1.5 HP

Building No. 7 - Navy
2 condensate pumps – 1.5 HP
1 chilled water pump – 15 HP

Building No. 8
2 hot water pumps – 1/3 HP
2 condensate pumps – 1/3 HP

Building No. 15- Barracks
2 sewer ejection pumps – 2 HP
2 condensate pumps – 1.5 HP
2 condensate pumps – ½ HP
2 hot water pumps – ½ HP

Building No. 16- Radiation Lab.
2 condensate pumps – 1.5 Hp
2 condenser pumps – 7.5 HP

Building No. 19- Boiler Plant
3 circulator pumps – ¾ HP

Building No. 20- Warehouse
2 condensate pumps – 1.5 HP
2 condensate pumps – ¾ HP
2 sewer ejection pumps – 3 HP

Building No. 30- Health Clinic
2 condensate pumps – 1.5 HP
2 circulator pumps – 1.5 HP

Building No. 32- Officers Club
2 sewer ejection pumps – 3 HP

Building No. 36

2 condensate pumps
1 circulating pump

Building No. 42- Ariem

2 sewer ejector pumps – 3 HP
2 condensate pumps – 3 HP
2 condenser water pumps – 30 HP
2 hot water pumps – 7.5 HP
2 chilled water pumps – 20 HP
2 chilled water return pumps – 15 HP
1 circulator pump (on roof)
2 boiler pumps (on roof)

Building No. 44

2 condensate pumps

Technical Provisions
Section TP – 13
Boiler Plant Operations & Support

TP – 13.1 Scope of Work:

a. The Contractor shall furnish all labor, materials, and equipment necessary to operate and maintain the central boiler plant and satellite boilers at SSCOM. The Contractor shall provide labor to support all or any aspects of boiler plant operation and maintenance.

b. The Contractor may be working along-side Government personnel to operate and maintain the central boiler plant and satellite boilers.

TP – 13.2 Boiler Descriptions:

a. The central boiler consists of three (3) high pressure, 20,000 pound/hour steam boilers equipped with dual fuel (#6 Fuel Oil and Natural Gas) burners.

b. The satellite boilers consist of two (2) low pressure, natural gas fired steam boilers with input capacities ranging from 310.3 to 2,200 MBH.

c. Both the central boiler plant and satellite boilers have associated pumps, piping, valves, pre-heaters, de-aerators, water softeners, chemical feed systems and other equipment and systems to be operated and maintained by the Contractor.

TP – 13.3 Boiler Water Testing:

a. The Contractor shall perform daily water tests on the boilers located in Building Nos. 15, 42 and 19 and the condensate return in Building No. 19.

b. The daily water tests shall include, but not limited to, testing for total dissolved solids, phosphate, caustic tannin, sulfite and pH.

c. The Contractor shall maintain zeolite water softeners located in Building Nos. 15, 19 and 42 in accordance with manufacturer recommendations.

d. The Contractor shall add chemicals and blowdown boilers to maintain the chemical limits established by the CO or his authorized representative.

TP – 13.4 Boiler Inspection:

a. The Contractor shall prepare the three (3) boilers located in Building No. 19 for annual inspections.

b. The Contractor shall be responsible for opening and proper closing of manholes, water columns, access plates and returning boilers to operating conditions after inspections.

c. The Contractor shall perform soot removal and minor refractory repairs to the furnace, gas passes and breaching in each boiler. Completion of this work will require entrance into a confined space.

d. The Contractor shall be required to enter the steam and mud drum of each boiler for the purpose of reaming and power flushing the boiler tubes and cleaning the drums.

TP – 13.5 Boiler Plant Operation:

a. Contractor shall perform boiler plant watch duties to include, but not limited to, starting and stopping of dual-fuel burners, pumps, induced and forced draft fans, automatic firing controls, and blowdown valves.

b. Contractor shall maintain boiler plant operating log, chemical testing log, and required maintenance logs.

c. Contractor shall monitor fire and intrusion alarms that are located in the boiler plant and respond according to procedures established by the CO or his authorized representative.

d. Contractor shall be required to adjust steam pressure reducing stations to maintain required pressure.

e. Contractor shall be required to perform housekeeping tasks as a part of watch duties including, but not limited to, clean up of fuel oil, chemical or other spills or releases that occur as a part of routine boiler plant operation.

TP – 13.6 Boiler Plant Maintenance:

a. Contractor shall perform boiler maintenance to include, but not limited to, water side maintenance, including cleaning of inside of boiler tubes, internal cleaning of steam drums, mud drums, water wall headers and replacement of all water side and steam side gaskets.

b. Contract shall remove soot from the inside of furnace, gas passes, and breathings. External scraping of boiler tubes shall also be required.

c. Contractor shall be required to perform maintenance and repairs to boiler plant equipment including, but not limited to, pumps, electric motors, compressors, soot blowers, pressure regulators, gauges, valves and electric/electronic boiler operating controls.

d. Contractor shall operate and maintain auxiliary boilers located in Building Nos. 15 and 42 to the same degree as the central boiler plant. In addition, the contractor shall accomplish transfer of steam supply from the auxiliary boilers and the central plant when required.

e. During the process of performing maintenance service or emergency services, the Contractor shall supply, repair and replace any worn, damaged or broken parts immediately. Only parts that are correctly designed and suitable in all respects shall be used. The Government will not be liable for repairs made necessary by negligence, accident or misuse by the Contractor.

f. The Contractor shall have and keep on-hand locally, a supply of suitable spare parts for the normal service, maintenance and repair of all boiler plants identified above.

TP – 13.7 Boiler Plant Personnel Qualifications:

a. Contractor employee(s) must possess a valid Massachusetts 2nd Class fireman license.
b. Contractor employee(s) must have no fear of working in confined spaces.
c. Contractor employee(s) must have no fear of working at heights of up to sixty (60) feet.
d. Contractor employee(s) must have the ability to life at least eighty (80) pounds.
e. Contractor employee(s) must be respirator fit tested and have 40-hour training/certification.

Technical Provisions
Section TP – 14
Snow Plowing Operations

TP – 14.1 Scope of Work:

a. The Contractor shall provide all labor, equipment and materials necessary to perform snowplowing, sidewalk cleaning and sanding operations throughout the U.S. Army Soldier Systems Center (SSCOM). All work shall be performed in accordance with the attached specifications. Areas in which plowing, clearing and sanding are to take place are identified in Technical Exhibit C.

b. Work shall consist of the plowing; clearing of roads, parking lots, sidewalks, stairs, entryways and gazebos; sanding of roads, parking lots, sidewalks, stairs, fire escapes and entryways. The Contractor shall remove and haul snow from designated areas to lakeside locations.

c. All snow shall be removed from catch basins to allow free drainage. The catch basins shall be cleaned at the end of each snowstorm.

d. All snow shall be removed from around the fire hydrants so that they can be easily accessible. The cleared area shall be approximately six (6) feet wide around each hydrant. All hydrants shall be clear at the end of each snowstorm.

e. All snow shall be removed from around dumpsters to all for pedestrian access for disposal of refuse. No snow shall be shoveled or plowed in front of the dumpsters that would interfere with their being emptied.

f. No snow shall be stockpiled at or near any monitoring wells.

g. Pedestrian access lanes to any fuel fill pipes shall be four (4) feet wide from the curb/roadside to the fill pipe of the fuel tanks. Vehicle plowing of these lanes will not be allowed.

TP – 14.2 Plowing Operations:

a. Snow plowing shall include the clearing of snow from roadways and parking areas by pushing and piling snow into adjacent areas. Snow piles shall be left in designated areas of parking lots. At parking lot entrances and exits, the snow shall be plowed back four (4) feet from the edge of pavement for traffic visibility. Snow banks shall not exceed three (3) feet in height.

b. Roadways (401,058 sq. ft.) and parking areas (486,540 sq. ft.) measure in total approximately 887,598 square feet.

c. All parking lots and entrances shall be plowed and kept continuously clear of snow. The Contractor will not allow snow to accumulate more than two (2) inches. Snow shall be plowed to bare pavement, with no trailing windrows left in the plowed areas. Parking lot curbs shall be visible and catch basins cleared and exposed. All parking spaces, with the exception of designated snow pile areas, shall be cleared of snow and available for parking.

TP – 14.3 Sidewalks, Stairs, Building Entries:

a. All sidewalks; building aprons, stairs, fire escapes and doorways; shall be cleaned free of snow and ice and sanded after each snowstorm. Sidewalks are to be plowed using sidewalk plows only. Snow blowers will be used along with hand shoveling of building aprons, stairs and doorways. Contractor shall be required to mark all sidewalks and other structures and hydrants before the start of the snow season.

b. Approximate total areas in square feet:
   1. Sidewalks – 20,427
   2. Building aprons and handicap ramps – 6,750
   3. Stairs and Building entry ways – 3,500

TP – 14.4 Sanding:

a. Sand shall meet or exceed Massachusetts Highway Department specifications for highways and bridges, 1988 or latest edition, Section M1, Soils and Borrow materials, M1.01.0 (Sand Borrow). Sand Borrow shall consist of clean inert, hard, durable grains or quartz or other hard durable rock, free from loam or clay, surface coatings or other foreign materials. The allowable amount of material passing a No. 200 sieve as determined by AASHTO-T11 shall not exceed 10% by weight. The maximum particle size for sand borrow shall be M1.04.0 Type A, ¼ inch.

b. Approximate areas in square feet:
   1. Area to be applied mechanically – 316,293
   2. Area to be applied manually – 11,420

c. All sanding of the parking lots and sidewalks shall be performed as an on-call requirement. The sanding application shall be a complete coverage of the entire parking areas and sidewalks, not a drive-by or drive-thru spot application.

TP – 14.5 Estimated Snowfall:

a. For the purpose of this contract, the estimated frequency of plowing, clearing and sanding for SCCOM is identified below:

6 storm events – 4” and under accumulation
4 storm events – over 4” to 10” accumulation
2 storm events – over 10 to 15” accumulation
2 storm events – over 15” accumulation

14 estimated storms at Natick Labs

b. For the purpose of this contract, snowfall accumulation is defined as the total accumulation of snow as measured from the beginning to the end of a storm event.

TP – 14.6 Snow Removal Priority:

a. The following locations shall be plowed/shoveled/sanded in their ranked order of priority:

1. Main Gate Entrance
2. Headquarters – Building No. 1
3. Enlisted Barracks – Building No. 15
4. Roadways
5. Parking Areas
6. Sidewalks and Fire Escapes
7. Building Entry Ways

Technical Provisions
Section TP – 15
Door Maintenance & Repair

TP – 15.1 Scope of Work:

a. The Contractor shall supply all labor, materials, tools and equipment necessary to keep in proper operating condition all automatic pedestrian, overhead and standard-entry doors.

b. The Contractor shall inspect, service and/or repair all doors identified herein semi-annually during the contract period.

c. During the process of performing maintenance service or emergency services, the Contractor shall supply, repair and replace any worn, damaged or broken parts immediately. Only parts that are correctly designed and suitable in all respects shall be used. The Government will not be liable for repairs made necessary by negligence, accident or misuse by the Contractor.

d. The Contractor shall have and keep on-hand locally a supply of suitable spare parts for the normal service, maintenance and repair of all doors identified in this contract.

e. The Contractor should be aware that lead-based paint might be present on doors.

TP – 15.2 Automatic Pedestrian Doors:

a. Contractor shall service and keep in proper operating condition all doors, hinges, latches, locking mechanisms and thresholds. Current equipment includes operator gear boxes, gear box seals, arm closures, chains, clutches, safety systems including motion and presence sensors, lockout relays and door opening switching devices. Equipment also includes operator microprocessor with associated safety controls. The majority of existing door operators are Dor-o-matic senior swing or smaller Besam - all surface mounted.

b. Automatic pedestrian doors are listed below:

<u>Building No. 1</u>
Main Entry, 2 double swing doors with 2 activating switches

<u>Building No. 3</u>
East End, 1 slider with microwave controls
Center North, 1 double swing with 2 microwave controls
Center North Walkway, 1 single swing with 2 activating switches
West End, 1 double swing with 2 activating switches

<u>Building No. 4</u>
East End, 1 slider with microwave controls
Center South, 1 double swing with 2 microwave controls
West End, 1 double swing with 2 activating switches

Building No. 30
West End, 2 double swing with 2 activating switches

Building No. 36
Southeast, 1 single swing with 2 activating switches
Northeast, 1 single swing with 2 activating switches

c. Overhead commercial doors are listed below:

Building No. 2
SW Corner, bi-parting, 10’ x 12’, 440 volt, 3 phase
South-left, bi-parting, 10’ x 10’, 440 volt, 3 phase
South-right, bi-parting, 10’ x 10’, 440 volt, 3 phase

Building No. 3
SE Basement, rolling steel, 8’ x 9’, 208 volt, 3 phase

Building No. 4
SE Basement, rolling steel, 8’ x 9’, 208 volt, 3 phase
NW Basement, rolling steel, 8’ x 9’, 208 volt, 3 phase
West Loading, rolling steel, 7’ x 8’, 208 volt, 3 phase

Building No. 5
SE Corner, rolling steel with access door, 12’ x 15’, 440 volt, 3 phase
SW Corner, rolling steel with access door, 10’ x 15’, 440 volt, 3 phase
West Center, rolling steel, 11’ x 15’, manual
West Center, rolling steel, 11’ x 15’, manual
West Center, rolling steel, 11’ x 15’, manual
West Center Inner W-4, bi-parting, 10’ x 12’, 440 volt, 3 phase
West Center Inner W-4, bi-parting, 10’ x 12’, 440 volt, 3 phase
West Raincourt – Exterior, rolling steel, 10’ x 12’, 440 volt, 3 phase
West Raincourt – Interior, bi-parting, 7’ x 8’, 440 volt, 3 phase

Building No. 7
SE Corner Exterior, bi-parting, 10’ x 12’, 208 volt, 3 phase

Building No. 14
South Exterior Upper Level, bays, 3-11 (8), folding, 10’ x 10’, 208 v, 3p
South Exterior Upper Level, bays 1&2 (2), folding, 10’ x 12’, 208 v, 3p
South Exterior Upper Level, bays, 1-3 (3), folding, 11’ x 10’, 208 v, 3p

Building No. 16
South Center Exterior, rolling steel, 10’ x 12’, manual

Building No. 19
North West Upper, rolling steel, 10’ x10’, 208 volt, 3 phase
South Lower, rolling steel, 8’ x 10’, manual

Building No. 20
North Loading Dock, bays 1-4 (4), rolling steel, 12’ x 10’, 208 volt, 3p

Building No. 36
North Exterior, rolling steel, 10’ x 12’ 208 volt, 3 phase
West Exterior, rolling steel, 11’ x 12’, 208 volt, 3 phase
NE Loading Dock, rolling steel, 12’ x 12’ manual
NW Loading Dock, rolling steel, 12’ x 12’, manual

Building No. 42
East Lower, folding insulated, 14’ x 9’, 110 volt

Building No. 45
South Right, rolling steel, 14’ x 12’, 208 volt, 3 phase
South Left, rolling steel, 14’ x 13, 208 volt, 3 phase

Building No. 65
North, rolling steel, 12’ x 12’, 110 volt
South, rolling steel, 10’ x 10’, manual

Building No. 77
North, rolling steel, 10’ x 10’, manual
South, rolling steel, 10’ x 10’, manual

Building No. 79
South, wooden double sliding, 12’ x 14’, manual

Building No. 86
East, rolling steel, 8’ x 7’, manual

Building No. 93
West, rolling steel, 10’ x 10’, manual
East, rolling steel, 10’ x 10’, manual

Building No. 94
West, rolling steel, 12’ x 12’, manual
South, rolling steel, 12’ x 12’, manual

Building No. T24
South, bays 1-4 (4), corrugated steel, double slider, 12’ x 12’, manual

Building No. T25
West, bays 1-4 (4), corrugated steel, double slider, 12’ x 12’, manual

Building No. T26
North, corrugated steel, double slider, 12’ x 12’, manual
South, corrugated steel, double slider, 12’ x 12’, manual

Building No. T27
South, corrugated steel, double slider, 12’ x 12’, manual

Building No. T76

South, folding, 8’ x 7’, manual

Shed No. 2
West, rolling steel, 12’ x 12’, manual

Total number and type of overhead commercial doors:
7 bi-parting
33 rolling steel
15 folding
12 sliding wood/steel

d. Fire doors are listed below:

Building No. 1
12 – Single door, interior, exterior, stairwell, fire
8 – Double door, interior, exterior, stairwell, fire

Building No. 2
0 – Single door, interior, exterior, stairwell, fire
5 – Double door, interior, exterior, stairwell, fire

Building No. 3
12 – Single door, interior, exterior, stairwell, fire
1 – Double door, interior, exterior, stairwell, fire

Building No. 4
14 – Double door, interior, exterior, stairwell, fire
6 – Single door, interior, exterior, stairwell, fire

Building No. 5
1 – Single door, interior, exterior, stairwell, fire
6 – Double door, interior, exterior, stairwell, fire

Building No. 7
6 – Single door, interior, exterior, stairwell, fire, etc.
0 – Double door, interior, exterior, stairwell, fire, etc.

Building No. 8
1 – Single door, interior, exterior, stairwell, fire, etc.
0 – Double door, interior, exterior, stairwell, fire, etc.

Building No. 15
0 – Single door, interior, exterior, stairwell, fire, etc.
2 – Double door, interior, exterior, stairwell, fire, etc. w/ card pass

Building No. 16
4 – Single door, interior, exterior, stairwell, fire, etc.
2 –Double door, interior, exterior, stairwell, fire, etc.

Building No. 19

0 – Single door, interior, exterior, stairwell, fire, etc.
1 – Double door, interior, exterior, stairwell, fire, etc.

Building No. 20
2 – Single door, interior, exterior, stairwell, fire, etc.
0 – Double door, interior, exterior, stairwell, fire, etc.

Building No. 30
0 – Single door, interior, exterior, stairwell, fire, etc.
2 – Double door, interior, exterior, stairwell, fire, etc.

Building No. 32
1 – Single door, interior, exterior, stairwell, fire, etc.
3 – Double door, interior, exterior, stairwell, fire, etc.

Building No. 36
6 – Single door, interior, exterior, stairwell, fire, etc.
6 – Double door, interior, exterior, stairwell, fire, etc.

Building No. 38
2 – Single door, interior, exterior, stairwell, fire, etc.
1 – Double door, interior, exterior, stairwell, fire, etc.

Building No. 42
2 – Single door, interior, exterior, stairwell, fire, etc.
12 – Double door, interior, exterior, stairwell, fire, etc.

Building No. 44
3 – Single door, interior, exterior, stairwell, fire, etc.
0 – Double door, interior, exterior, stairwell, fire, etc.

Building No. 45
2 – Single door, interior, exterior, stairwell, fire, etc.
12 – Double door, interior, exterior, stairwell, fire, etc.

Building No. 78
1 – Single door, interior, exterior, stairwell, fire, etc.
2 – Double door, interior, exterior, stairwell, fire, etc.

Building No. 80
1 – Single door, interior, exterior, stairwell, fire, etc.
1 – Double door, interior, exterior, stairwell, fire, etc.

Building No. 86
2 – Single door, interior, exterior, stairwell, fire, etc.
2 – Double door, interior, exterior, stairwell, fire, etc.

Building No. 93
1 – Single door, exterior

Building No. 94
2 – Double door, 1 exterior, 1 interior
1 – Single door, exterior

TP – 15.3 Overhead Commercial Doors:

a. The Contractor shall service and keep in proper operating condition all overhead sectional, rolling steel and bi-parting door types. All doors shall be inspected and/or service and repaired semi-annually.

b. The Contractor will check the following items while inspecting overhead commercial doors, door hardware and operators:

1. Cables
2. Spring tension
3. Hinges
4. Fasteners
5. Condition of track
6. Weatherseals
7. Belts
8. Oil-gear box
9. Limit switches, relays and reversing edges
10. Safety controls

c. The Contractor will service or repair the following items while maintaining overhead commercial doors, door hardware and operators:

1. Replace cables if damaged
2. Adjust spring tension
3. Lubricate rollers, replace if worn
4. Replace/tighten fasteners
5. Repair/replace worn track
6. Replace worn weatherseals
7. Fill gear box oil
8. Adjust chains
9. Adjust clutches
10. Adjust brakes
11. Lubricate trolley
12. Repair/replace limit switches, relays and reversing edges
13. Repair/replace safety controls

TP – 15.4 Standard-entry, Corridor and Stairwell Doors:

a. The Contractor shall service and keep in proper operating condition standard glass and metal doors located at exterior entries, corridors and stairwells.

b. The Contractor will check and service, if needed, the following items while inspecting standard-entry, corridor and stairwell doors, door hardware and operators:

1. Hydraulic closures (both fire and standard)
2. Hinges (both heavy duty and continuous)
3. Pivots
4. Weather stripping and astragals
5. Thresholds
6. Panic hardware (both fire and standard)

c. The Contractor will service or repair the following items while maintaining standard-entry, corridor and stairwell doors, door hardware and operators:

1. Repair/replace hydraulic closures (both fire and standard)
2. Repair/replace hinges (both heavy duty and continuous)
3. Repair/replace pivots
4. Repair/replace weather stripping and astragals
5. Repair /replace thresholds
6. Repair/replace panic hardware (both fire and standard)

TP – 15.5 Reporting:

After every scheduled inspection, the Contractor shall present a written report detailing the condition of all doors to the CO or his authorized representative. These reports will be used to record door functionality and to determine when equipment is beyond repair and warrants replacement. Each door has an identification number that is to be used in written reports. Invoices will include door identification number, building and work being invoiced.

TP – 15.6 Emergency Service Calls:

a. The Contractor shall be responsible for servicing all doors when emergencies arise due to abuse or accidents not covered by this contract.

b. Where doors can be secured, service or repair the following business day, after availability of parts, will be required.

c. The Contractor shall submit an invoice for labor and parts to cover emergency calls to the CO or his authorized representative.

Technical Provisions
Section TP – 16
Landscape Maintenance

TP – 16.1 Scope of Work:

a. The Contractor shall supply all labor, materials, tools and equipment necessary to mow, trim, weed, prune, mulch, rake, mulch and irrigate grassed, vegetated or landscaped areas. Weed and maintain new areas, re-seed bare areas, maintain and replace trees/shrubs, or plant new areas with grass, shrubs or trees as directed by the CO or his authorized representative.

b. The Contractor shall control undesirable weeds, insects and diseases.

c. The Contractor shall have sufficient capability in equipment and manpower to mow and rake or collect grass clippings on all grass areas in one (1) day.

d. Only State licensed Pesticide Applicators can apply fertilizers, weed control chemicals or insect control agents. The Contractor shall provide the CO or his authorized representative with copies of licenses and certifications.

TP – 16.2 Mowing:

a. Grass shall not be allowed to reach a height in excess of three (3) inches in height or the seed heads four (4) to six (6) inches in height.

b. Grass shall be mowed approximately weekly from 1 April to 30 September each year for approximately 16 mowings annually.

c. Exceptions to the above estimated mowing schedule may be identified by the CO or his authorized representative to better utilize manpower or respond to unusual conditions such as drought or unusually heavy rainfall.

d. Grass is to be cut to a height of not more than one-and-one-half (1 ½) inches above ground.

e. Grass shall be neatly trimmed around lights, walkways, guardrails, power poles, hydrants, barrier posts and directional signs. Ditches and other areas that cannot me but by machine will be hand cut. Weeds and grass around building, tables, gazebos, etc.

f. All litter should be picked up before moving and trimming commences.

g. Mowing and trimming shall not begin before 8:00 a.m. or continue beyond 8:00 p.m. Mowing and trimming in the housing area shall not begin before 10:00 a.m. or continue beyond 5:00 p.m. Mowing and trimming is not permitted on Saturdays, Sundays or holidays unless authorized by the CO or his authorized representative.

h. Rain, heavy dew, or other inclement weather conditions may make conditions for mowing unsuitable. The CO or his authorized representative will make all determinations as to whether conditions are suitable

for mowing. It shall be the contractor's responsibility to coordinate with the CO or his authorized representative before starting mowing when any condition exists that would adversely affect mowing performance or damage turf areas.

i. The Contractor will sweep or blow grass clippings off sidewalks, parking lots and paved roads on the same day that grass is cut or trimmed. Mowing and trimming shall be accomplished in such a manner as not to endanger or annoy employees or residents.

TP – 16.3 Location of Work:

Approximate mowing areas are delineated on the maps found in Technical Exhibit B.

TP – 16.4 Minor Mowing:

Open field areas shall be mowed monthly from 1 April to 30 September each year for approximately 6 mowings annually.

TP – 16.5 Trimming:

a. Grass along the edges of all sidewalks will be trimmed to remove grass and other vegetative material from encroaching onto the sidewalks and to convey a neat orderly appearance. Trimming activities will extend one (1) to two (2) inches back from the sidewalk/building edge. This work will be scheduled whenever grass or vegetative material extends onto the sidewalk more than one (1) to two (2) inches.

b. Weed eaters or similar trimming devices will not be used to trim around trees less than five (5) inches in diameter at the base.

TP – 16.6 Restoring Bare and Eroded Areas:

All bare areas, eroded areas or other areas designated by the CO or his authorized representative, where a satisfactory stand of grass does not exist, shall be seeded as directed by the CO or his authorized representative.

TP – 16.7 Seeding:

a. All grass seed shall be labeled in accordance with the U.S. Department of Agriculture Rules and Regulations under the Federal Seed Act. Grass seed will be furnished in sealed, standard containers unless otherwise approved by the CO or his authorized representative. Seed that is wet or moldy or that has been otherwise damaged in transit or storage will not be acceptable. Seeding rates will be label rates or as directed by the CO or his authorized representative.

b. All seed types, species and varieties will be designated and/or approved by the CO or his authorized representative.

TP – 16.8 Mulching:

All areas seeded will be mulched. Much shall be spread uniformly 1-2 inches thick in a continuous blanket. Suitable mulch for seeded areas included straw or hay.

TP – 16.9 Pruning Trees and Shrubs:

a. The Contractor shall prune ornamental shrubs and tress as needed and in accordance with standard horticultural practices. Pruned trees and shrubs shall retain required height and spread. Unless otherwise directed by the CO or his authorized representative, the Contractor shall only remove injured or dead branches from trees.

b. Evergreen shrubs shall be pruned between 1 May and 1 July. Deciduous shrubs shall be pruned between 1 April and 1 May and between 1 August and 1 September or as otherwise directed by the CO or his authorized representative.

c. Plants shall be thinned to encourage bushier growth and remove dead and broken branches. The typical growth pattern of individual plants shall be retained with as much height and spread as practical. Buts shall be smooth and at an angle to permit water run off. All trimmings shall be removed from the site and disposed of offsite. Cuts one (1) inch in diameter or larger shall be painted with an approved tree wound dressing.

TP – 16.10 Planting:

a. All ornamental trees, shrubs, and ground covers in areas included within the scope of this contract, which are either dead or in unacceptable condition, shall be replaced. The replacement plants shall be the same size, quality and species as originally planted. Planting of replacement or new plants shall be done between the dates of 15 November and 15 March unless otherwise directed by the CO or his authorized representative. The CO or his authorized representative will specify areas to be planted, quantity, species and size of plants.

b. Plant pits shall be dug to produce vertical sides and flat, uncompacted bottoms. When pits are dug with an auger and sides of the pits become glazed, the glazed surface shall be scarified. The minimum allowable dimensions of plant pits shall be six (6) inches deeper than the depth of plant balls and 2 foot greater in width than ball diameter.

TP – 16.11 Irrigation:

The Contractor will be required to provide services for cleaning, adjusting, repairing and/or replacing sprinkler heads, all related tubing, piping, valves, and control boxes associated with the irrigation system to insure proper maintenance and operation.

Vegetation inside the graveled containment area around each sprinkler head shall be removed as necessary to insure visibility of the sprinkler to grass mowers. Work will be performed under this section by work order issued by the CO or his authorized representative.

TP – 16.12 Pesticides:

a. The Contractor shall treat all areas as designated and approved by the CO or his authorized representative to control unwanted grass, insects, weeds or brush.

b. Use of pesticides must comply with all applicable state and Federal laws and must be registered with the U.S. Environmental Protection Agency. Herbicides, insecticides and fungicides shall be used as needed and in accordance with the manufacturer's recommendations and labeling.

c. All pesticides shall be applied by a licensed applicator. A copy of the license of all applicators shall be provided to the CO or his authorized representative.

d. Detailed records of each pesticide application will be provided to the CO or his authorized representative including date, pesticide type, area treated, etc.

TP – 16.13 Hazard Trees:

a. Hazardous trees and limbs in public thoroughfares or operation areas which are dead, diseased, damaged, or fallen shall be cut and removed for the site unless otherwise specified by the CO or his authorized representative. Trees and limbs can be stockpiled in approved locations until such a time that they are removed from SSCOM.

b. The Contractor shall remove and dispose of the trees with a minimum impact on government property.

TP – 16.14 Special Provisions:

a. Tractors and riding mowers shall be equipped as required by the CO or his authorized representative. All riding mowing equipment requires rollover protection and seat belts when in use on this contract. Slopes of 4 to 1 grade or steeper shall not be mowed when the ground is soft or the grass is wet.

b. Personal protective equipment shall include, but not be limited to safety toe shoes, hearing protection, long-sleeved shirts and long pants. Approved safety glasses, goggles or face shields will be worn while using weed eaters or similar trimming devices.

c. All self-propelled mowing equipment shall be equipped with turf tires or similar tires approved by the CO or his authorized representative.

Technical Provisions
Section TP – 17
Roof Inspection and Maintenance

TP – 17.1 Scope of Work:

The Contractor shall supply all labor, materials, tools and equipment necessary to inspect, maintain and repair building roofs and associated flashing and trim.

TP – 17.2 Inspections:

a. The Contractor shall perform an initial walk-over inspection 21 identified buildings to determine the condition of roofing, flashing and waterproofing for the purpose of preparing a plan (including schedules and cost estimates) needed for future roof repair or replacement and preventive maintenance.

b. The Contractor shall provide the CO or his authorized representative with the following items:

1. A thorough roof inspection and written Roof Condition Report of each building to be included in the initial report as well as subsequent bi-annual reports.

2. A visual bi-annual walkover inspection of each of the identified roofs. The inspection shall include removal of any debris found on the roof(s). The inspection shall include the clearing and cleaning of all roof drains and roof perimeter drains. The inspection shall also include a thorough visual inspection of the each roof to locate and identify any defects or other potential problems with the current roofing system.

3. As part of the bi-annual inspection, the Contractor shall submit a written inspection report for each building indicating the findings of the inspection. The Roof Condition Report shall also include recommendations and estimated costs to correct or repair or replace all noted deficiencies.

4. At the end of any emergency service or inspection task, the Contractor will prepare and submit a Roof Condition Report for the roof that has been serviced and/or inspected.

c. The Contractor shall be trained or experienced in inspecting, analyzing and correctly diagnosing roof leaks and potential leaks and the ability to correct all noted deficiencies.

d. Semi-annual inspections will be scheduled for on or about the first week of April and on or about the first week of October.

TP – 17.3 Certification and Licensing:

a. All workers shall be trained and certified and/or licensed for the types of materials used and the styles of roof that they will be working on. All workers must be certified by OSHA in all and any types or equipment and materials that may be used while inspecting, maintaining and repairing roofs, flashing and trim within the scope of this contract. Copies of certifications and licenses will be provided to the CO or his authorized representative.

b. The Contractor shall be certified or licensed in each of these types of roofs listed below, so as not to void any warranties when replacements or repairs are being made.

1. JPS Elastometrics, Stevens Roofing System
2. Firestone
3. Owens Corning
4. Genflex
5. Carlisle Syn Tec
6. Versico
7. Futura
8. Any built-up roofs that are currently in use

c. The Contractor shall also be an approved applicator of the listed roof systems, as well as all other built-up roofs that are being inspected, serviced and maintained under this contract:

TP – 17.4 Core Analysis and Infrared Moisture Testing:

The Contractor shall conduct core analysis and infrared moisture testing, as needed, as part of the roof inspection service.

TP – 17.5 Roofed Buildings:

Building Numbers 1, 2, 3, 4, 5, 7, 8, 14, 15, 16, 20, 30, 32, 36, 38, 42, 45, 78, 80, 86 and 92 will be inspected, serviced and maintained under this contract:

Technical Provisions
Section TP – 18
Elevator Inspection and Maintenance

TP – 18.1 Scope of Work:

a. The Contractor shall supply all labor, materials, tools and equipment necessary to inspect, service, maintain and install all elevators identified below, including but not limited to, machine motor, generator, controller and selector parts, worm gears, bearings, brakes, magnet coils, brake motors, brake shoes, brushes, windings, commutators, rotating elements, contact coils, magnet frames, leveling devices, cams, car and hoistway door hangers, tracks and guides, door operating devices, interlocks and contacts, car door gates, car opening devices, car and pit lights, push buttons, enunciators, indicators, and elevator and scheduling equipment.

b. All elevator work shall be accomplished during normal work hours unless approved by the CO or his authorized representative.

c. During the process of performing maintenance service or emergency services, the Contractor shall supply, repair and replace any worn, damaged or broken parts immediately. Only parts that are correctly designed and suitable in all respects shall be used. The Government will not be liable for repairs made necessary by negligence, accident or misuse by the Contractor.

d. The Contractor shall have and keep on-hand locally, a supply of suitable spare parts for the normal service, maintenance and repair of all elevators listed below.

TP – 18.2 Elevator Inventory:

Building & No.	**Manufacturer**	**Use**	**Type**
Headquarters #1	Payne S-99701 Cheney Handi PE-36	Passenger Passenger	Traction Wheelchair
Research #3	Payne S-99701 Stanley	Passenger Freight	Traction Hydraulic
Development #4	Payne S-99700	Passenger	Traction
Officers Club #32	Wheel-O-Vator PCDE – 120	Passenger	Wheelchair
USARIEM # 42	Armour 307-092 Armour S-450	Passenger Freight	Traction Hydraulic
Navy #86	Dover	Passenger	Hydraulic

TP – 18.3 Elevator Inspection Program:

a. The Contractor shall be responsible for compliance with the Commonwealth of Massachusetts Inspection Program protocol that consists of the following:

1. The Contractor shall prepare applications for state inspections for each elevator identified in the Elevator Inventory and any supplemental elevators maintained under this contract. Contractor shall prepare all elevators maintained under this contract for state inspections and shall accompany the inspector during the inspections.

2. All fees associate with these applications shall be paid for by the contractor and should be identified in the contractor's estimate. The Contractor should include the cost of application, coordination and on-site assistance to the state inspector in his cost estimate.

3. The Contractor or his designated Work Leader shall accompany the state inspector during all phases of the inspection.

4. The Contractor, upon notification form the State of the inspection and testing dates, will notify the CO or his authorized representative who will coordinate the SCCOM Elevator Inspection Program.

b. The Government reserves the right to independently perform inspections and tests to insure that elevators are maintained in safe working condition at all times.

c. The Government reserves the right to deactivate any elevator until such a time that the elevator passes all inspection and testing criteria. In the event that the Contractor is unable to repair the elevator and/or replace any worn or damaged parts or materials, the Government reserves the right to stop the Contractor's work and complete the Task Order with Government labor force or other contract resources.

TP – 18.4 Elevator Service and Maintenance:

a. All elevator maintenance will commence within four (4) hours after issuance of a Task Order and be completed within thirty-six (36) hours unless otherwise agreed upon by the Contractor and the CO or his authorized representative.

b. The Contractor shall keep elevator guide rails clean and properly lubricated, except when roller type guides are involved, no rail lubrication shall be used. The Contractor shall renew glide shoe jibs or rollers as required to insure smooth and quiet operation.

c. The Contractor shall check the wearing condition of all wire ropes and cables each month and will repair or replace faulty or unsafe wire ropes and cables as needed to insure safe operation.

d. During each inspection, the Contractor shall check and maintain properly sealed oil reservoirs to prevent leakage and shall, at least once annually, flush out and replace old gear oil from the hoist boxes. The exterior of the machinery and any other parts subject to rust must be kept clean and painted at all times.

e. Motor windings and controller coils shall be inspected monthly and treated with proper insulating compound.

f. The Contractor shall will examine and adjust monthly all safety devices and governors and shall equalize the tension of all hoisting cables and wire ropes.

g. The Contractor shall maintain a Summary or Work Report that is to be updated monthly and be available for inspection at all times.

h. Any problems identified during elevator inspection, service or maintenance shall be immediately reported to the CO or his authorized representative.

TP – 18.5 Monthly Lubrication Schedule:

The Contractor shall lubricate the following components found on all elevators:

a. Worm gearing
b. Thrust bearings
c. Sheave shaft bearings
d. Motors
e. Brakes
f. Sleeve bearings
g. Brake motor bearings
h. Switch hinge pins

Technical Provisions
Section TP – 19
Scheduled, Unscheduled & Emergency Services

TP – 19.1 Scope of Work:

a. The Contractor shall perform maintenance, repair and replacement services as identified in Task Orders issued by the CO or his authorized representative. Work will include, but not be limited to minor construction, boiler plant operations, demolition, roof replacement, tree replacement, paving, sidewalk construction, remodeling and building repair.

a. Unscheduled repair and replacement services shall include, but are not limited to, emergency maintenance, repair, replacement and minor construction and demolition work.

TP – 19.2 Task Orders for Unscheduled Services:

a. Task Orders will consist of maintenance, repair, replacement, minor construction projects, and other services not covered under other scheduled services and less than $250,000 in value.

b. Task Orders for Unscheduled Services shall be issued to the Contractor from the CO or his authorized representative in a written work order. The Contractor shall make a site investigation and return a detailed estimate to the COR within three (3) hours when requested by the CO or his authorized representative, otherwise, three (3) calendar days or sooner for high priority or emergency work.

c. The Contractor shall warranty all work completed as an Unscheduled Service for one (1) year after Government acceptance, to include labor, material, and equipment. The Director of Public Works (DPW) or the Chief O&M, thru the COR, shall assign the priorities, completion date(s) and approvals of all Task Orders for Unscheduled Services.

d. Task Orders for Unscheduled Services shall be individual maintenance, repair, replacement or construction tasks or other services, for installed equipment and equipment in place, less than $250,000 in total value to include labor, material and equipment.

TP – 19.3 Option Quantities:

a. Option quantities for unscheduled work will be issued by the CO or his authorized representative on a unit basis. Option quantities of unscheduled work may be performed with Contractor-owned resources or by a sub-contractor, but in no event will the performance or an option quantity job be accepted as an excusable delay of a base level job or all other scheduled or emergency work.

b. The general type of work to be performed on option quantities will be work on installed equipment and equipment in place, new construction, remodeling, and other contract supplemental work. Both option quantity work and scheduled work will be unfunded until the work is issued by the CO or his authorized representative and funded separately by the requestor on a work order basis.

c. The detailed estimates shall include at a minimum both the Contractor's and corresponding Means (identify publisher)figures or Means figures alone for:

1. Labor: The number and cost of man-hours by type of labor category and occupation.

2. Materials: Bill of material including quantities, size, make, model, manufacturer, name, cost, and all descriptive data available.

3. Equipment: Cost of Contractor-furnished equipment, number or hours used and type (purchase, lease, rent, etc.).

4. Schedule: A progressive/continuous project/construction schedule necessary to complete the project on time.

5. Subcontractors and Consultants: Cost summary to include labor, material, equipment, fringe costs, and subcontracts.

6. Drawings: Professional drawings, to scale, of all construction and demolition, to include general, architectural, mechanical, electrical, utilities, grounds and other Contractor interface.

7. Asbestos Abatement – or hazardous materials plan/assessment: An initial asbestos assessment of the construction/demolition site, either thru documentation research, or physical testing, by the Contractor, of any asbestos containing material (ACM) and the disposition of same.

TP – 19.4 Plans and Specifications:

a. The Contractor shall provide plans and specifications as well as an estimate for all Task Orders unless otherwise directed. The plans and specifications shall be printed and bound.

b. The drawings shall be size "E" and shall be categorized as general, architectural, electrical or mechanical and foundation.

TP – 19.5 Emergency Task Orders for Unscheduled Services:

a. If the Government has determined that an "emergency work" situation exits, the CO or his authorized representative can direct the Contractor to begin/continue work immediately. The emergency Task Order process is as follows:

1. Contractor shall immediately begin/continue work as directed by the CO or his authorized representative.

2. Contractor shall prepare a rough estimate in accordance with directions issued by the CO or his authorized representative within three (3) hours and a detailed estimate within one (1) day.

3. The Government will review, amend (if necessary) and return the work estimate to the Contractor within two (2) workdays for preparation of a best and final estimate.

4. Contractor shall produce and forward a detailed estimate for the emergency work to the CO or his authorized representative within three (3) calendar days after receipt of the returned emergency Task Order.

5. The Government will approve and issue a formal Task Order as per negotiated detailed estimate.

b. After an emergency Task Order has been issued, the Contractor may request an extension on any approved Task Order for scheduled work. Any extension will need to be mutually agreed upon by both the Contractor and the CO or his authorized representative.

Note: If a Task Order for scheduled work is converted to an Emergency Task Order, all costs for the service Task Order will be transferred to the Emergency Task Order and the initial Task Order for scheduled work canceled.

TP – 19.6 Work Leaders:

For each Unscheduled or emergency Task Order, the Contractor shall furnish a Construction Work Leader with the authority and responsibility for completion of that project. The Work Leader shall be the Contractor's point of contact for that project and shall have the authority to schedule and supervise personnel, make decisions regarding access, priorities of work requirements, and interfacing with other Task Orders issue to the Contractor.

Technical Provisions
Section TP - 20
Asbestos Containing Material (ACM) Inspection and Abatement

TP – 20.1 Scope of Work:

a. All work involving Asbestos Containing Material (ACM) will be incidental to performing the activities and service identified herein. The Contractor will not be directed to remove ACM for the sole purpose of eliminating asbestos. An asbestos survey was performed in 1987 and again in 1995 to determine the location and condition of all accessible ACM; and friable ACM has been either removed, repaired or encapsulated. The Soldier Systems Command has been surveyed under the Army Asbestos Management Program and was found to be free on friable ACM in all accessible areas. The results of this survey can be obtained from the Asbestos Program Manager located at Building 93. An Asbestos Management Plan (AMP) for the installation dated 30 June 2000 is also available for review in the ESHO.

b. The Contractor shall supply all labor, materials, tools and equipment necessary to perform preconstruction survey(s) and assessment(s) for planned demolition and/or renovation, inspection, preventive maintenance or repair action(s) that may be reasonably expected to encounter Category 1 or Category 2 nonfriable ACM. Category 1 nonfriable ACM includes resilient floor covering (including ACM floor tile), asphalt roofing materials, packing and gaskets. Category 2 nonfriable ACM includes all other nonfriable ACM, such as asbestos cement roofing tiles, siding, transite board, etc.

c. When conducting any work that might involve demolition and/or renovation of nonfriable ACM, the Contractor shall consult and comply with the following ACM abatement documents:

1. EPA (NESHAP, 40 CFR 61, Subpart M) regulations.
2. State and local requirements (both regulatory and local jurisdiction landfill).
3. Army and Installation guidance (available from the ESHO).
4. EPA rulings on demolition and renovation of buildings.
5. OSHA asbestos (29 CFR Part 1926.1101) regulations.

d. All Contract employees that will come into contact with ACM will be required to have asbestos awareness training. Specific training requirements for inspectors, project designers, Contractors' supervisors and workers are found in the EPA Model Accreditation Program (MAP) in 40 CFR Part 763, Subpart E, Appendix C. All Contract employees are required to be trained for the OSHA Class of work to be performed by the Commonwealth of Massachusetts.

e. The Contractor shall comply will all legally applicable and appropriate Federal, state, Army and local laws and regulations.

f. The work covered by this provision includes the removal and repair of ACM which are encountered during the performance of inspection, demolition, alteration and maintenance activities at this installation. It also includes spill/emergency cleanup and housekeeping activities associated with completing assigned work.

g. The Contractor will provide a 10-day Massachusetts Department of Environmental Protection notification form to the MADEP office involving asbestos removal.

h. Before start of work, Contractor performing any preconstruction surveys, demolitions, repair or new installations must get approval from SSC's Asbestos Management Team.

TP – 20.2 Asbestos Survey:

The Contractor shall complete an asbestos survey before any demolition work begins. The Contractor will be required to follow the Soldiers System Command's Asbestos Program Management Document that is available from the installation Environmental Safety and Health Office.

Asbestos includes chrysotile, amosite, crocidolite, tremolite asbestos, anthophylite asbestos, actinolite asbestos, and any of these minerals that have been chemically treated and/or altered. ACM is any material containing more than one percent asbestos.

TP – 20.3 Planning an ACM Project:

a. An asbestos abatement plan for small-scale projects will contain the information listed in items 1 through 13 below:

1. Physical description of the work area.
2. Description of the approximate amount of material to be abated.
3. Schedule for turning off and sealing existing ventilation systems (where applicable).
4. Contractor employee hygiene procedures.
5. Labeling procedures.
6. Description of personal protective equipment and clothing to be worn by contract employees.
7. Description of the local exhaust ventilation systems to be used (where applicable).
8. Description of work practices to be observed by employees.
9. Description of methods, equipment and procured items to be used in abating the ACM.
10. Definition of air monitoring fiber clearance levers (where applicable).
11. Air monitoring plan (where applicable).
12. Description of emergency procedures in case of work-site accidents or injuries, or equipment failure.
13. Names of contract employees to perform work.
14. Plan reviewed and approved by ESHO Program Manager.

TP – 20.4 Unexpected Discovery of ACM:

a. For any previously untested facilities or building components suspected to contain asbestos and located in areas impacted by the work, the Contractor shall notify the CO or his authorized representative. The Contractor shall also notify the ESHO who will advise the Contractor on how to proceed.

b. Any additional components identified as ACM that have been approved by the CO or his authorized representative for removal or abatement shall be properly handled by the Contractor and will be paid for by a negotiated change to the Task Order.

TP – 20.5 Building Occupancy:

a. Asbestos should only be abated during those periods when building occupancy is minimal or prohibited. If abatement must be scheduled while the building is occupied, the Contractor must provide the following protective measures:

1. Install critical barriers that prevent access into and the exchange of airflow from the abatement-regulated work area to the occupied area(s).
2. Install ventilation systems that will continuously maintain a negative pressure within the contained abatement work area and provide an air change rate of at least four or more air changes per hour within the abatement area.
3. Provide fire evacuation routes for compliance with local fire codes.
4. Provide safe access to building service areas such as electrical panels, rest room facilities and heating, ventilating and air-conditioning systems.
5. Readjust building air-handling systems for isolation of airflow into/from the abatement area.
6. Provide alternate travel paths for employees and building occupants or temporary facilities.
7. Provide security during and after daily abatement activities.

TP – 20.6 Contractor Response Actions:

a. Before work begins in any area found or identified to contain nonfriable ACM, the work area must be prepared in a manner that will protect human health and the environment. Work area preparations must be designed to contain fibers during the entire abatement process. The Contractor shall provide asbestos abatement through the following three basic approaches to asbestos exposure control listed below in order of preference:

    1. Encapsulation – The ACM is coated with a penetrating or bridging sealant to prevent release of asbestos fibers into the air.

    2. Removal – The ACM is taken out of the building.

    3. Deferred Action – The encapsulation, enclosure or removal of ACM is postponed to a later date.

TP – 20.7 Personal Protection:

a. OSHA requires that the type of respirator used by the Contractor be determined by personal air monitoring that quantifies fiber content in the environment where the individual employee works. The responsibility for personal air monitoring is the abatement Contractor's.

b. The Contractor shall take immediate corrective action where a possible asbestos-related health hazard has been identified.

c. The Contractor shall notify facility occupants and any asbestos-related health hazard.

d. The Contractor shall assess the relative health risks for alternative control actions. Asbestos should not be removed for the sole purpose of eliminating asbestos.

e. The Contractor is responsible for worker education/training programs. All applicable workers should meet the mandatory training requirements specified in 40 CFR Part 763, Model Accreditation Program for the particular type of work they are to perform.

TP – 20.8 ACM Facilities:

a. The Contractor will reasonably be expected to encounter nonfriable ACM while working on the following activities, systems or facilities:

1. Repairing or removing furnaces, boilers, pipes and other plumbing, heating, gas and sewer distribution systems.
2. Sawing, sanding or grinding fire-retardant building materials such as transite walls. Transite building material cannot be cut, sanded or ground.
3. Replacing or removing brake shoes and clutch linings.
4. Demolishing, repairing or altering buildings/building sections.
5. Cooling tower inspection and maintenance.
6. Air conditioning and refrigeration inspection and maintenance.
7. Pump inspection and preventive maintenance.
8. Boiler operation and maintenance.
9. Roof inspection, maintenance and repair.

b. Prior to any maintenance, repair or replacement work beginning on these activities, the Contractor will conduct an asbestos survey to determine if nonfriable ACM will be encountered. Contractor must have pre-approval from the SSC Asbestos Program Manager.

TP – 20.9 Clearance Procedures:

a. When asbestos abatement is complete and all CM waste is removed from the affected areas, the final cleanup is completed, the CO or his authorized representative will certify the areas as safe before the warning signs and boundary warning tape can be removed. Air clearance will be provided by an independent Industrial Hygienist.

b. The Contractor and the CO will visually inspect all surfaces within the containment area for residual material or accumulated debris. The Contractor shall reclean all areas showing dust or residual materials. The Government will have the option to perform monitoring to certify the areas are safe before entry is permitted.

TP – 20.10 Disposal of Asbestos:

a. All ACM wastes including contaminated wastewater filters, scrap, debris, bags, containers, equipment, and asbestos contaminated clothing, shall be collected and placed in approved containers. Waste within the containers shall be wetted in case the container is breached. Asbestos containing waste shall be disposed of off Government property in accordance will all applicable regulations.

b. For temporary storage, sealed impermeable containers shall be stored in a manner acceptable to and in an area assigned by the CO or his authorized representative. Procedure for transportation and disposal shall comply with 40 CFR 61, Subpart M, state, regional, and local standards.

c. The Contractor shall complete and provide the CO final completed copies of the Waste Manifest for all shipments of waste material as specified in 40 CFR 61, Subpart M and other required state waste manifest shipment records within 3 days of delivery to the landfill.

TP – 20.11 Emergency Abatement:

a. Circumstances may arise where ACM abatement must be performed in conjunction with unscheduled (emergency) repair work. An example of such a situation might be failure of a primary heating system that contains intact non-friable ACM.

b. Task orders issued under such circumstances require no major modifications from those conducted under normal circumstances; however, the following actions shall be taken by the Contractor following the event that precipitates the emergency situation:

1. The ACM should be stabilized to minimize additional release of asbestos to the extent feasible.
2. Personnel should be removed from the area of release to minimize potential exposure.
3. Steps should be taken to expedite the abatement process, such as accelerating authorizations, notifications and acquisitions of required equipment as needed.

c. The Contractor shall take immediate remedial action where health hazards are identified due to asbestos fiber exposure. The Asbestos Program Management Document provides for members of the SSC Asbestos Management Team, in emergency situations, to perform immediate remedial tasks without standard concurrences when these concurrences may not be obtainable.

Technical Exhibit A
Work Site

Areas of work to be performed by the Contractor are identified:

Technical Exhibit B
Mowing Map

Approximate mowing areas are identified on the attached map:

Technical Exhibit C
Snow Plowing Operations

Areas to be plowed, cleared or sanded are identified below:

Technical Exhibit D
General Plumbing

Plumbing systems are listed below:

Heating systems are listed below:

Gas distribution systems are listed below:

Sewer systems are listed below:

Steam distribution systems are listed below:

Below Grade (underground) utilities are listed below:

Changes in Section I

The following clauses which are incorporated by reference have been added or modified:

52.236-13	Accident Prevention	NOV 1991

Changes in Section K

The following clauses which are incorporated by full text have been added or modified:

52.222-22 PREVIOUS CONTRACTS AND COMPLIANCE REPORTS (FEB 1999)

The offeror represents that --

(a) [ ] It has, [ ] has not participated in a previous contract or subcontract subject to the Equal Opportunity clause of this solicitation;

(b) [ ] It has, [ ] has not, filed all required compliance reports; and

(c) Representations indicating submission of required compliance reports, signed by proposed subcontractors, will be obtained before subcontract awards.

(End of provision)

52.223-13 CERTIFICATION OF TOXIC CHEMICAL RELEASE REPORTING (OCT 2000)

(a) Submission of this certification is a prerequisite for making or entering into this contract imposed by Executive Order 12969, August 8, 1995.

(b) By signing this offer, the offeror certifies that--

(1) As the owner or operator of facilities that will be used in the performance of this contract that are subject to the filing and reporting requirements described in section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023) and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106), the offeror will file and continue to file for such facilities for the life of the contract the Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of EPCRA and section 6607 of PPA; or

(2) None of its owned or operated facilities to be used in the performance of this contract is subject to the Form R filing and reporting requirements because each such facility is exempt for at least one of the following reasons: (Check each block that is applicable.)

[ ] (i) The facility does not manufacture, process or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023(c);

[ ] (ii) The facility does not have 10 or more full-time employees as specified in section 313.(b)(1)(A) of EPCRA 42 U.S.C. 11023(b)(1)(A);

[ ] (iii) The facility does not meet the reporting thresholds of toxic chemicals established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

[ ] (iv) The facility does not fall within Standard Industrial Classification Code (SIC) major groups 20 through 39 or their corresponding North American Industry Classification System (NAICS) sectors 31 through 33; or

[ ] (v) The facility is not located within any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, or any other territory or possession over which the United States has jurisdiction.

252.225-7031 SECONDARY ARAB BOYCOTT OF ISRAEL (JUN 1992)

(a) Definitions. As used in this clause--

(1) "Foreign person" means any person other than a United States person as defined in Section 16(2) of the Export Administration Act of 1979 (50 U.S.C. App. Sec 2415).

(2) "United States person" is defined in Section 16(2) of the Export Administration Act of 1979 and means any United States resident or national (other than an individual resident outside the United States and employed by other than a United States person), any domestic concern (including any permanent domestic establishment of any foreign concern), and any foreign subsidiary or affiliate (including any permanent foreign establishment) of any domestic concern which is controlled in fact by such domestic concerns, as determined under regulations of the President.

(b) Certification. By submitting this offer, the Offeror, if a foreign person, company or entity, certifies that it--

(1) Does not comply with the Secondary Arab Boycott of Israel; and

(2) Is not taking or knowingly agreeing to take any action, with respect to the Secondary Boycott of Israel by Arab countries, which 50 U.S.C. App. Sec 2407(a) prohibits a United States person from taking.

(End of clause)